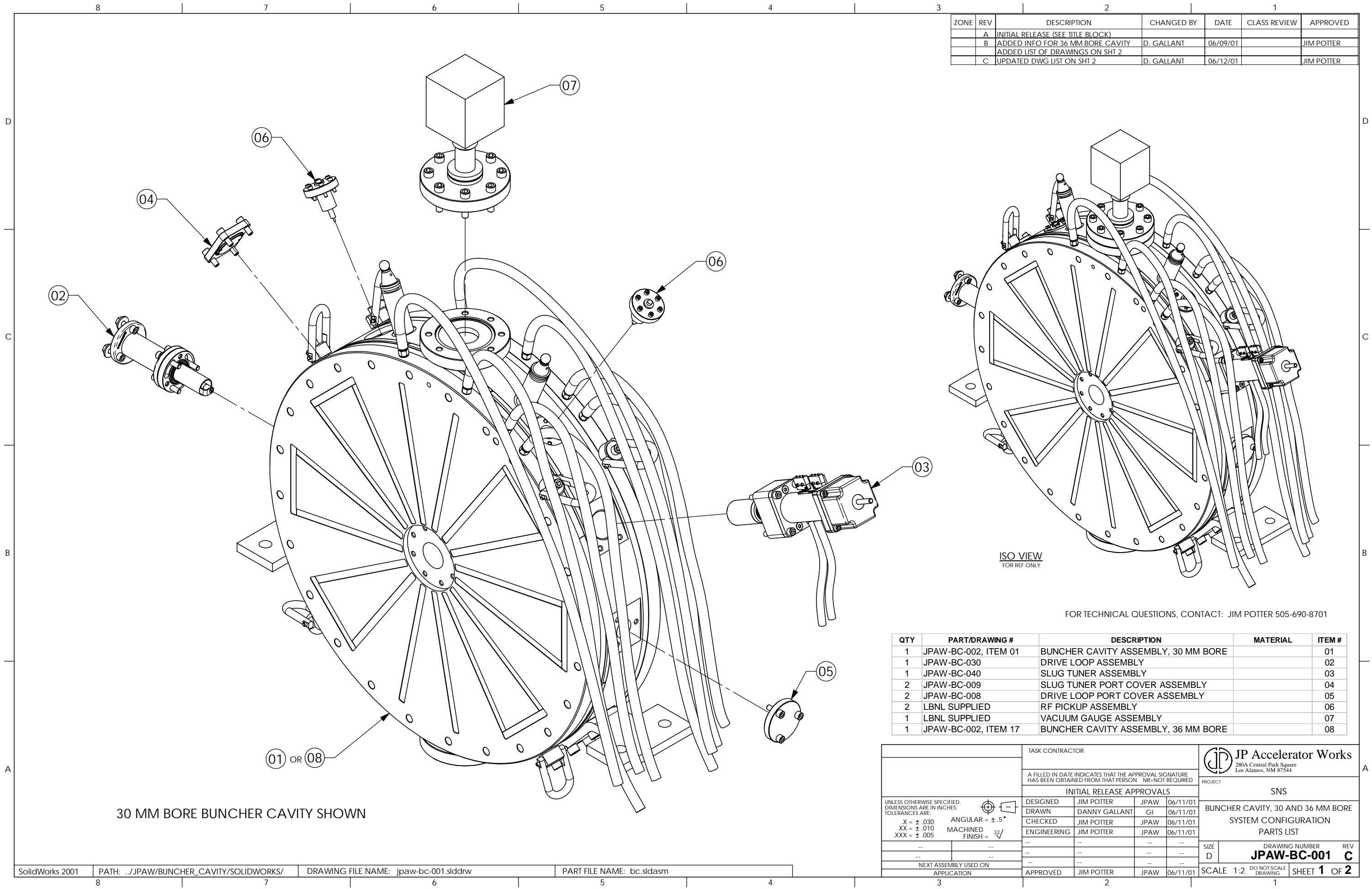


BUNCHER CAVITY DRAWING LIST

AS OF 06/12/01

- 1) Click on highlighted drawing numbers to view associated drawings.
- 2) Use "page down" key to view multi-sheet drawings at destination.
- 3) Click on "DWG LIST" bookmark to return to this page, or hit the |< button.
- 4) The bookmarks provide an independent means of navigation.

Dwg. Title Line 1	Dwg. Title Line 2	Dwg. Title Line 3	Dwg. Number	Status	# Shts
Buncher Cavity	System Configuration	Parts List	JPAW-BC-001	rev C	2
Buncher Cavity	30 and 36 mm Bore Assemblies	Parts List	JPAW-BC-002	rev D	1
Buncher Cavity, 30 mm Bore	Wide Side Weldment	Weldment Detail	JPAW-BC-003	rev D	7
Buncher Cavity, 30 mm Bore	Narrow Side Weldment	Weldment Detail	JPAW-BC-004	rev B	9
Buncher Cavity	Spacer	Detail	JPAW-BC-005	rev B	1
Buncher Cavity	Mounting Bracket	Detail	JPAW-BC-006	rev C	1
Buncher Cavity	Modified C-Seal	Detail	JPAW-BC-007	rev A	1
Buncher Cavity	Drive Loop Port Cover	Detail	JPAW-BC-008	rev A	2
Buncher Cavity	Slug Tuner Port Cover	Detail	JPAW-BC-009	rev A	2
Buncher Cavity, 30 mm Bore	Aluminum Mockup Assembly	Parts List	JPAW-BC-010	rev A	1
Buncher Cavity, 30 mm Bore	Aluminum Mockup, Narrow Side	Detail	JPAW-BC-011	rev A	1
Buncher Cavity, 30 mm Bore	Aluminum Mockup, Wide Side	Detail	JPAW-BC-012	rev A	2
Buncher Cavity, 36 mm Bore	Wide Side Weldment	Weldment Detail	JPAW-BC-015	rev A	4
Buncher Cavity, 36 mm Bore	Narrow Side Weldment	Weldment Detail	JPAW-BC-016	rev A	5
Buncher Cavity, 30 mm Bore	Plating Test Part	Detail	JPAW-BC-020	rev B	1
Buncher Cavity Drive Loop	Drive Loop Assembly	Parts List	JPAW-BC-030	rev 01	1
Buncher Cavity Drive Loop	Outer Conductor Weldment	Weldment Detail	JPAW-BC-031	rev 03	2
Buncher Cavity Drive Loop	Center Conductor Weldment	Weldment Detail	JPAW-BC-032	rev 03	5
Buncher Cavity Drive Loop	Feedthrough Reference Dimensions	Detail	JPAW-BC-039	rev A	1



ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				
	B	ADDED INFO FOR 36 MM BORE CAVITY	D. GALLANT	06/09/01		JIM POTTER
		ADDED LIST OF DRAWNGS ON SHT 2				
	C	UPDATED DWG LIST ON SHT 2	D. GALLANT	06/12/01		JIM POTTER

ISO VIEW
FOR REF ONLY

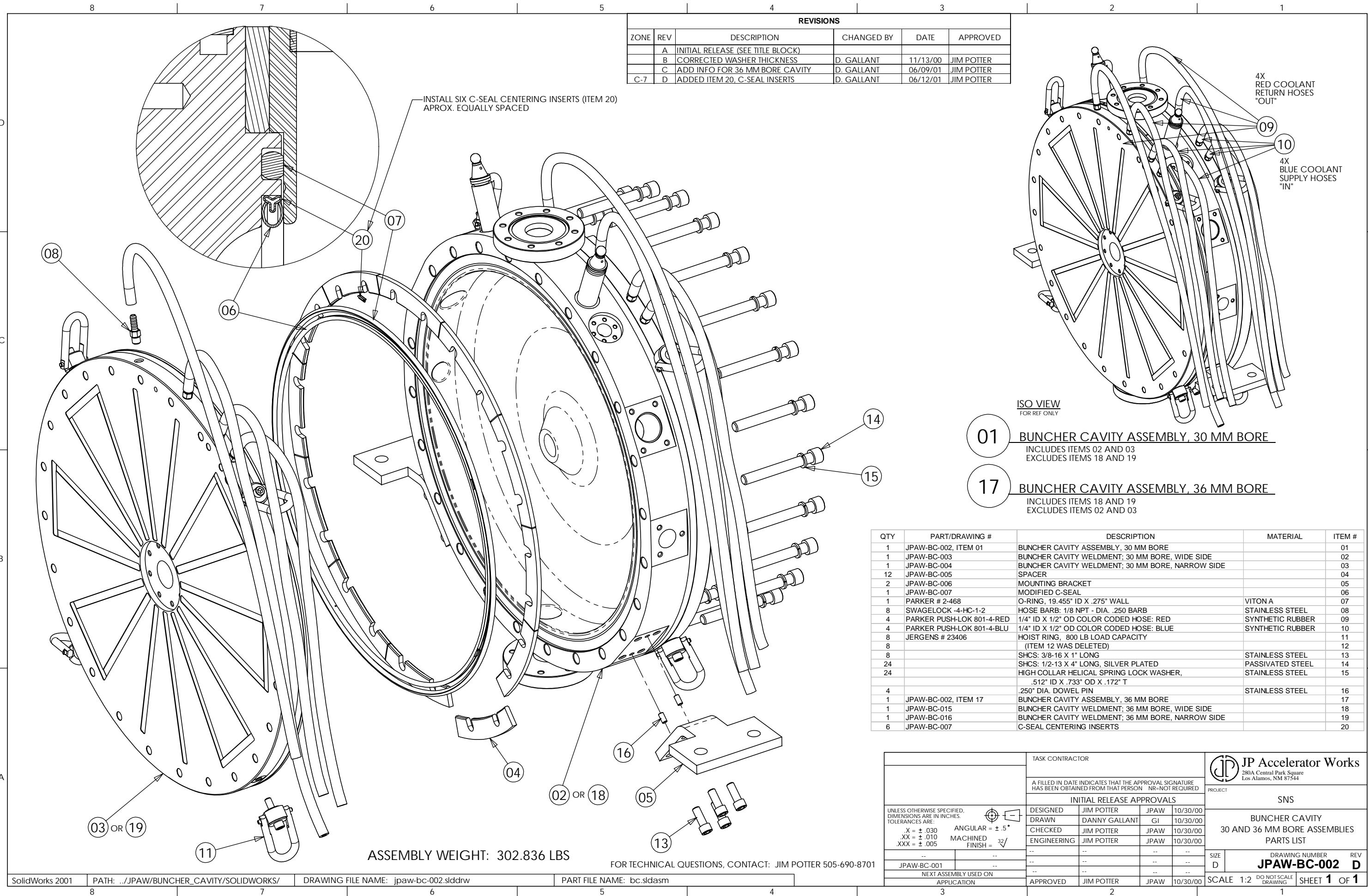
FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-002, ITEM 01	BUNCHER CAVITY ASSEMBLY, 30 MM BORE		01
1	JPAW-BC-030	DRIVE LOOP ASSEMBLY		02
1	JPAW-BC-040	SLUG TUNER ASSEMBLY		03
2	JPAW-BC-009	SLUG TUNER PORT COVER ASSEMBLY		04
2	JPAW-BC-008	DRIVE LOOP PORT COVER ASSEMBLY		05
2	LBNL SUPPLIED	RF PICKUP ASSEMBLY		06
1	LBNL SUPPLIED	VACUUM GAUGE ASSEMBLY		07
1	JPAW-BC-002, ITEM 17	BUNCHER CAVITY ASSEMBLY, 36 MM BORE		08

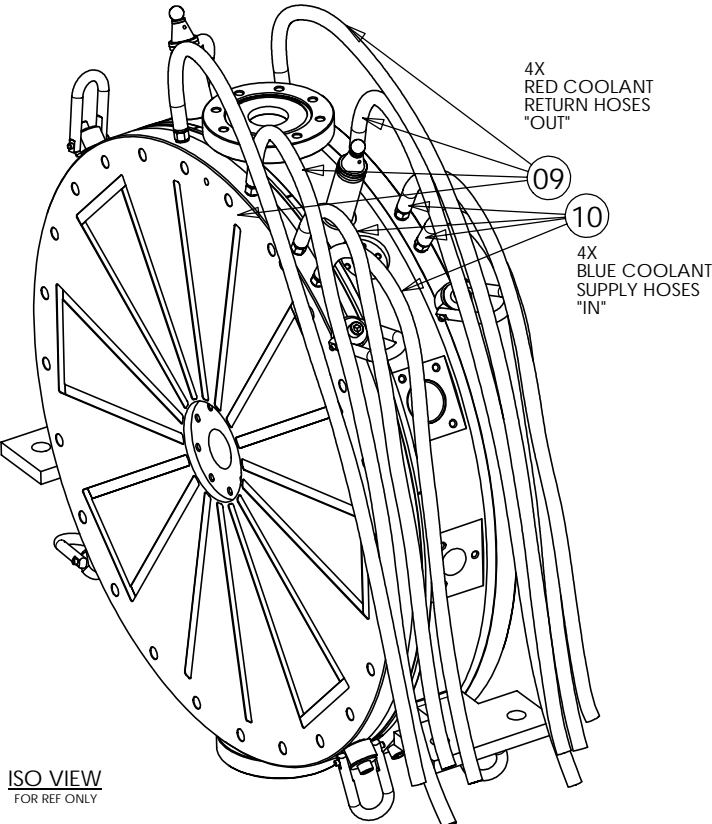
TASK CONTRACTOR				JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544	
A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR-NOT REQUIRED				PROJECT SNS	
INITIAL RELEASE APPROVALS				BUNCHER CAVITY, 30 AND 36 MM BORE SYSTEM CONFIGURATION PARTS LIST	
DESIGNED	JIM POTTER	JPAW	06/11/01	SIZE D	DRAWING NUMBER JPAW-BC-001
DRAWN	DANNY GALLANT	GI	06/11/01	REV C	
CHECKED	JIM POTTER	JPAW	06/11/01	SCALE 1:2 DO NOT SCALE DRAWING	
ENGINEERING	JIM POTTER	JPAW	06/11/01	SHEET 1 OF 2	
APPROVED JIM POTTER JPAW 06/11/01					

30 MM BORE BUNCHER CAVITY SHOWN

Dwg. Title Line 1	Dwg. Title Line 2	Dwg. Title Line 3	Dwg. Number	Status	# Shts
Buncher Cavity	System Configuration	Parts List	JPAW-BC-001	rev C	2
Buncher Cavity	30 and 36 mm Bore Assemblies	Parts List	JPAW-BC-002	rev D	1
Buncher Cavity, 30 mm Bore	Wide Side Weldment	Weldment Detail	JPAW-BC-003	rev D	7
Buncher Cavity, 30 mm Bore	Narrow Side Weldment	Weldment Detail	JPAW-BC-004	rev B	9
Buncher Cavity	Spacer	Detail	JPAW-BC-005	rev B	1
Buncher Cavity	Mounting Bracket	Detail	JPAW-BC-006	rev C	1
Buncher Cavity	Modified C-Seal	Detail	JPAW-BC-007	rev A	1
Buncher Cavity	Drive Loop Port Cover	Detail	JPAW-BC-008	rev A	2
Buncher Cavity	Slug Tuner Port Cover	Detail	JPAW-BC-009	rev A	2
Buncher Cavity, 30 mm Bore	Aluminum Mockup Assembly	Parts List	JPAW-BC-010	rev A	1
Buncher Cavity, 30 mm Bore	Aluminum Mockup, Narrow Side	Detail	JPAW-BC-011	rev A	1
Buncher Cavity, 30 mm Bore	Aluminum Mockup, Wide Side	Detail	JPAW-BC-012	rev A	2
Buncher Cavity, 36 mm Bore	Wide Side Weldment	Weldment Detail	JPAW-BC-015	rev A	4
Buncher Cavity, 36 mm Bore	Narrow Side Weldment	Weldment Detail	JPAW-BC-016	rev A	5
Buncher Cavity, 30 mm Bore	Plating Test Part	Detail	JPAW-BC-020	rev B	1
Buncher Cavity Drive Loop	Drive Loop Assembly	Parts List	JPAW-BC-030	rev 01	1
Buncher Cavity Drive Loop	Outer Conductor Weldment	Weldment Detail	JPAW-BC-031	rev 03	2
Buncher Cavity Drive Loop	Center Conductor Weldment	Weldment Detail	JPAW-BC-032	rev 03	5
Buncher Cavity Drive Loop	Feedthrough Reference Dimensions	Detail	JPAW-BC-039	rev A	1



REVISIONS					
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)			
	B	CORRECTED WASHER THICKNESS	D. GALLANT	11/13/00	JIM POTTER
	C	ADD INFO FOR 36 MM BORE CAVITY	D. GALLANT	06/09/01	JIM POTTER
C-7	D	ADDED ITEM 20, C-SEAL INSERTS	D. GALLANT	06/12/01	JIM POTTER



ISO VIEW
FOR REF ONLY

01 BUNCHER CAVITY ASSEMBLY, 30 MM BORE
INCLUDES ITEMS 02 AND 03
EXCLUDES ITEMS 18 AND 19

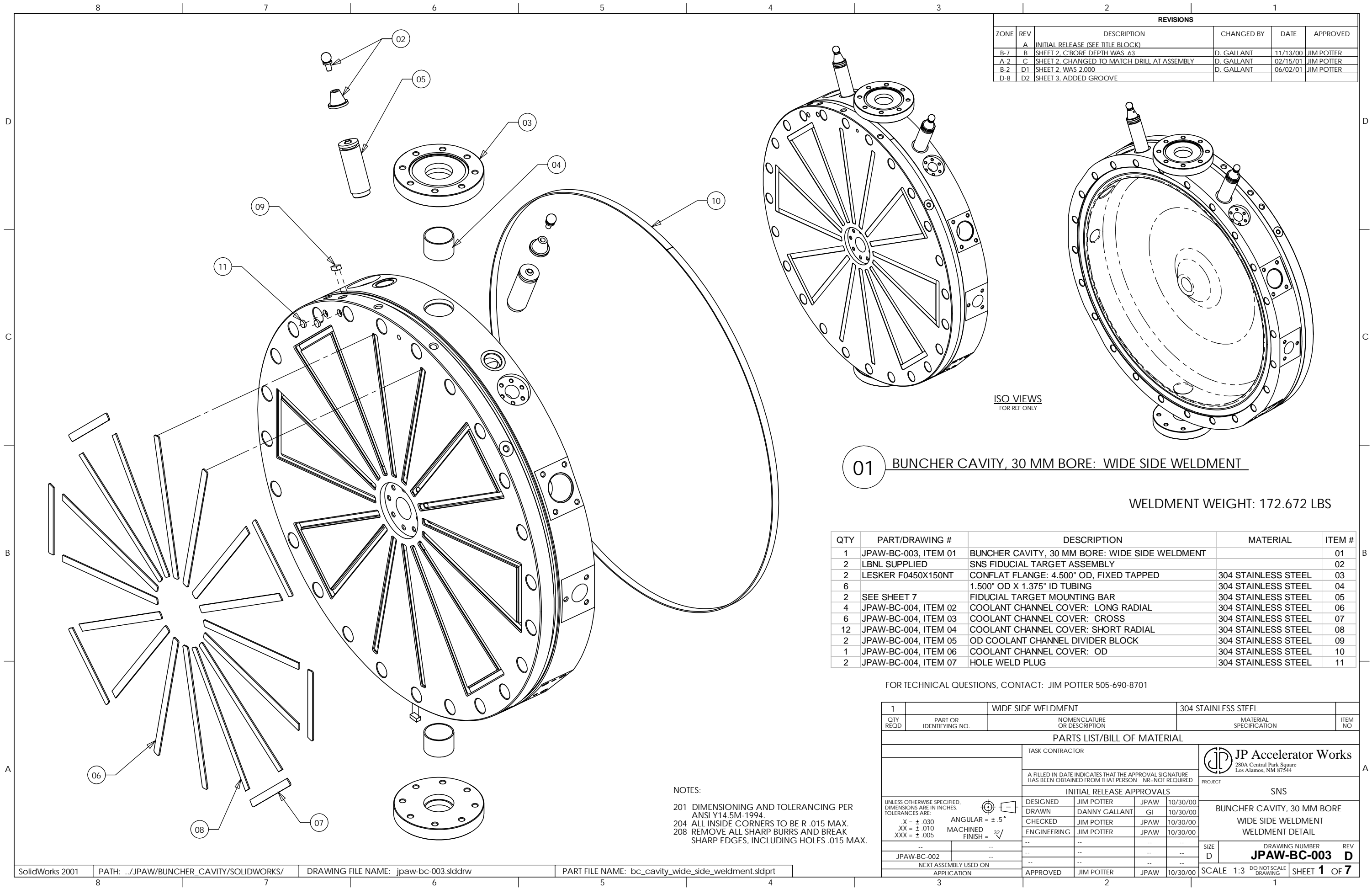
17 BUNCHER CAVITY ASSEMBLY, 36 MM BORE
INCLUDES ITEMS 18 AND 19
EXCLUDES ITEMS 02 AND 03

QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-002, ITEM 01	BUNCHER CAVITY ASSEMBLY, 30 MM BORE		01
1	JPAW-BC-003	BUNCHER CAVITY WELDMENT; 30 MM BORE, WIDE SIDE		02
1	JPAW-BC-004	BUNCHER CAVITY WELDMENT; 30 MM BORE, NARROW SIDE		03
12	JPAW-BC-005	SPACER		04
2	JPAW-BC-006	MOUNTING BRACKET		05
1	JPAW-BC-007	MODIFIED C-SEAL		06
1	PARKER # 2-468	O-RING, 19.455" ID X .275" WALL	VITON A	07
8	SWAGELOCK -4-HC-1-2	HOSE BARB: 1/8 NPT - DIA. .250 BARB	STAINLESS STEEL	08
4	PARKER PUSH-LOK 801-4-RED	1/4" ID X 1/2" OD COLOR CODED HOSE: RED	SYNTHETIC RUBBER	09
4	PARKER PUSH-LOK 801-4-BLU	1/4" ID X 1/2" OD COLOR CODED HOSE: BLUE	SYNTHETIC RUBBER	10
8	JERGENS # 23406	HOIST RING, 800 LB LOAD CAPACITY		11
8		(ITEM 12 WAS DELETED)		12
8		SHCS: 3/8-16 X 1" LONG	STAINLESS STEEL	13
24		SHCS: 1/2-13 X 4" LONG, SILVER PLATED	PASSIVATED STEEL	14
24		HIGH COLLAR HELICAL SPRING LOCK WASHER, .512" ID X .733" OD X .172" T	STAINLESS STEEL	15
4		.250" DIA. DOWEL PIN	STAINLESS STEEL	16
1	JPAW-BC-002, ITEM 17	BUNCHER CAVITY ASSEMBLY, 36 MM BORE		17
1	JPAW-BC-015	BUNCHER CAVITY WELDMENT; 36 MM BORE, WIDE SIDE		18
1	JPAW-BC-016	BUNCHER CAVITY WELDMENT; 36 MM BORE, NARROW SIDE		19
6	JPAW-BC-007	C-SEAL CENTERING INSERTS		20

TASK CONTRACTOR				JP Accelerator Works	
A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR-NOT REQUIRED				280A Central Park Square Los Alamos, NM 87544	
INITIAL RELEASE APPROVALS				PROJECT	
DESIGNED	JIM POTTER	JPAW	10/30/00	SNS	
DRAWN	DANNY GALLANT	GI	10/30/00	BUNCHER CAVITY	
CHECKED	JIM POTTER	JPAW	10/30/00	30 AND 36 MM BORE ASSEMBLIES	
ENGINEERING	JIM POTTER	JPAW	10/30/00	PARTS LIST	
..	SIZE	
JPAW-BC-001	DRAWING NUMBER	
NEXT ASSEMBLY USED ON APPLICATION				JPAW-BC-002 D	
APPROVED				SCALE 1:2 DO NOT SCALE DRAWING	
JIM POTTER JPAW 10/30/00				SHEET 1 OF 1	

ASSEMBLY WEIGHT: 302.836 LBS

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701



REVISIONS					
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)			
B-7	B	SHEET 2, C'BORE DEPTH WAS .63	D. GALLANT	11/13/00	JIM POTTER
A-2	C	SHEET 2, CHANGED TO MATCH DRILL AT ASSEMBLY	D. GALLANT	02/15/01	JIM POTTER
B-2	D1	SHEET 2, WAS 2.000	D. GALLANT	06/02/01	JIM POTTER
D-8	D2	SHEET 3, ADDED GROOVE			

ISO VIEWS
FOR REF ONLY

01 BUNCHER CAVITY, 30 MM BORE: WIDE SIDE WELDMENT

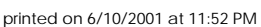
WELDMENT WEIGHT: 172.672 LBS

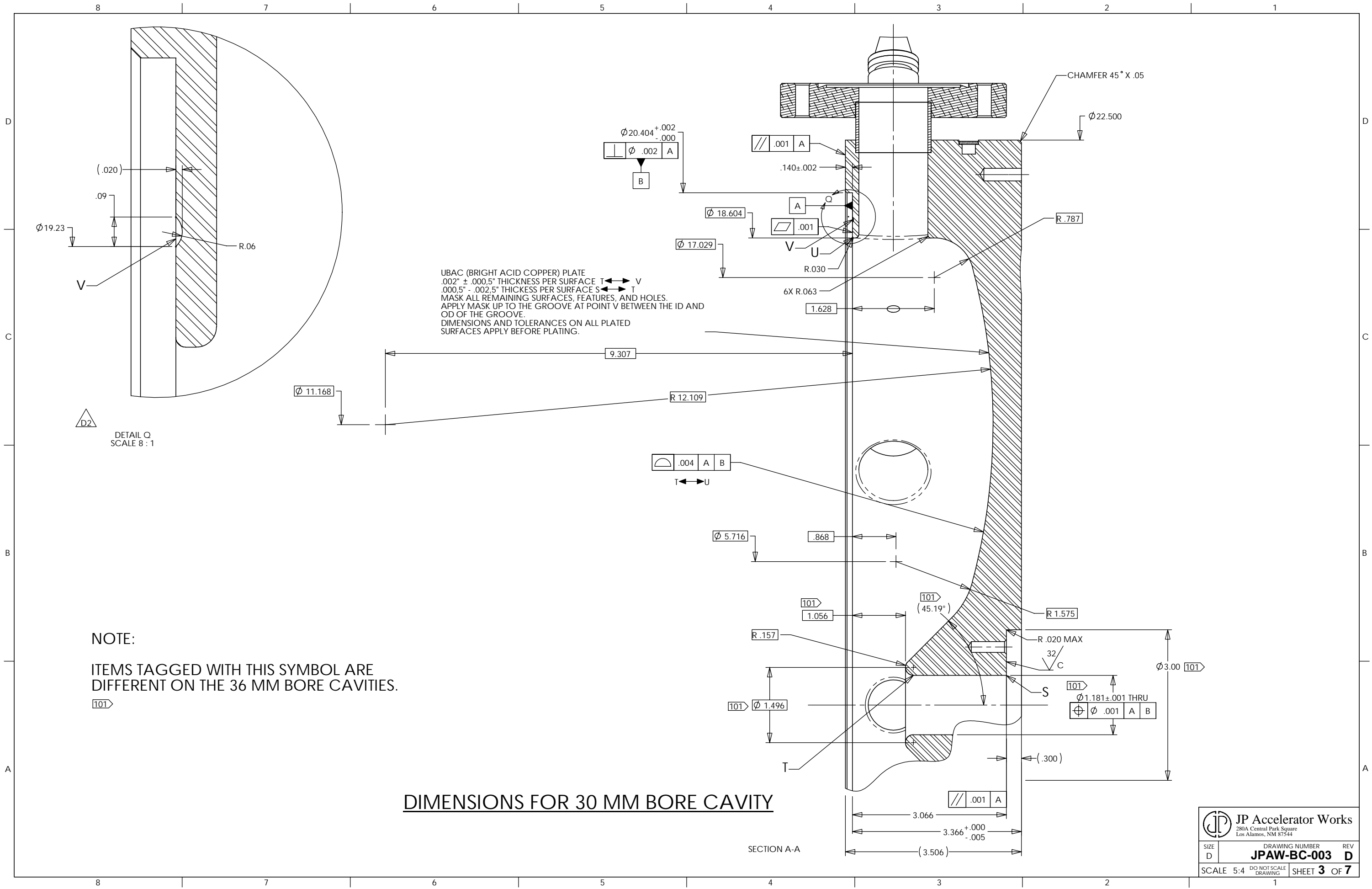
QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-003, ITEM 01	BUNCHER CAVITY, 30 MM BORE: WIDE SIDE WELDMENT		01
2	LBNL SUPPLIED	SNS FIDUCIAL TARGET ASSEMBLY		02
2	LESKER F0450X150NT	CONFLAT FLANGE: 4.500" OD, FIXED TAPPED	304 STAINLESS STEEL	03
6		1.500" OD X 1.375" ID TUBING	304 STAINLESS STEEL	04
2	SEE SHEET 7	FIDUCIAL TARGET MOUNTING BAR	304 STAINLESS STEEL	05
4	JPAW-BC-004, ITEM 02	COOLANT CHANNEL COVER: LONG RADIAL	304 STAINLESS STEEL	06
6	JPAW-BC-004, ITEM 03	COOLANT CHANNEL COVER: CROSS	304 STAINLESS STEEL	07
12	JPAW-BC-004, ITEM 04	COOLANT CHANNEL COVER: SHORT RADIAL	304 STAINLESS STEEL	08
2	JPAW-BC-004, ITEM 05	OD COOLANT CHANNEL DIVIDER BLOCK	304 STAINLESS STEEL	09
1	JPAW-BC-004, ITEM 06	COOLANT CHANNEL COVER: OD	304 STAINLESS STEEL	10
2	JPAW-BC-004, ITEM 07	HOLE WELD PLUG	304 STAINLESS STEEL	11

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

1		WIDE SIDE WELDMENT	304 STAINLESS STEEL	
QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO
PARTS LIST/BILL OF MATERIAL				
		TASK CONTRACTOR	JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544	
		A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR=NOT REQUIRED	PROJECT	
		INITIAL RELEASE APPROVALS	SNS	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: X = ± .030 XX = ± .010 XXX = ± .005	DESIGNED	JIM POTTER JPAW	10/30/00	BUNCHER CAVITY, 30 MM BORE WIDE SIDE WELDMENT WELDMENT DETAIL
	DRAWN	DANNY GALLANT GI	10/30/00	
	CHECKED	JIM POTTER JPAW	10/30/00	
	ENGINEERING	JIM POTTER JPAW	10/30/00	
JPAW-BC-002				
NEXT ASSEMBLY USED ON APPLICATION		APPROVED	JIM POTTER JPAW	10/30/00
SIZE D	DRAWING NUMBER	REV	SCALE 1:3	SHEET 1 OF 7
	JPAW-BC-003	D	DO NOT SCALE DRAWING	

NOTES:
201 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
204 ALL INSIDE CORNERS TO BE R .015 MAX.
208 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.






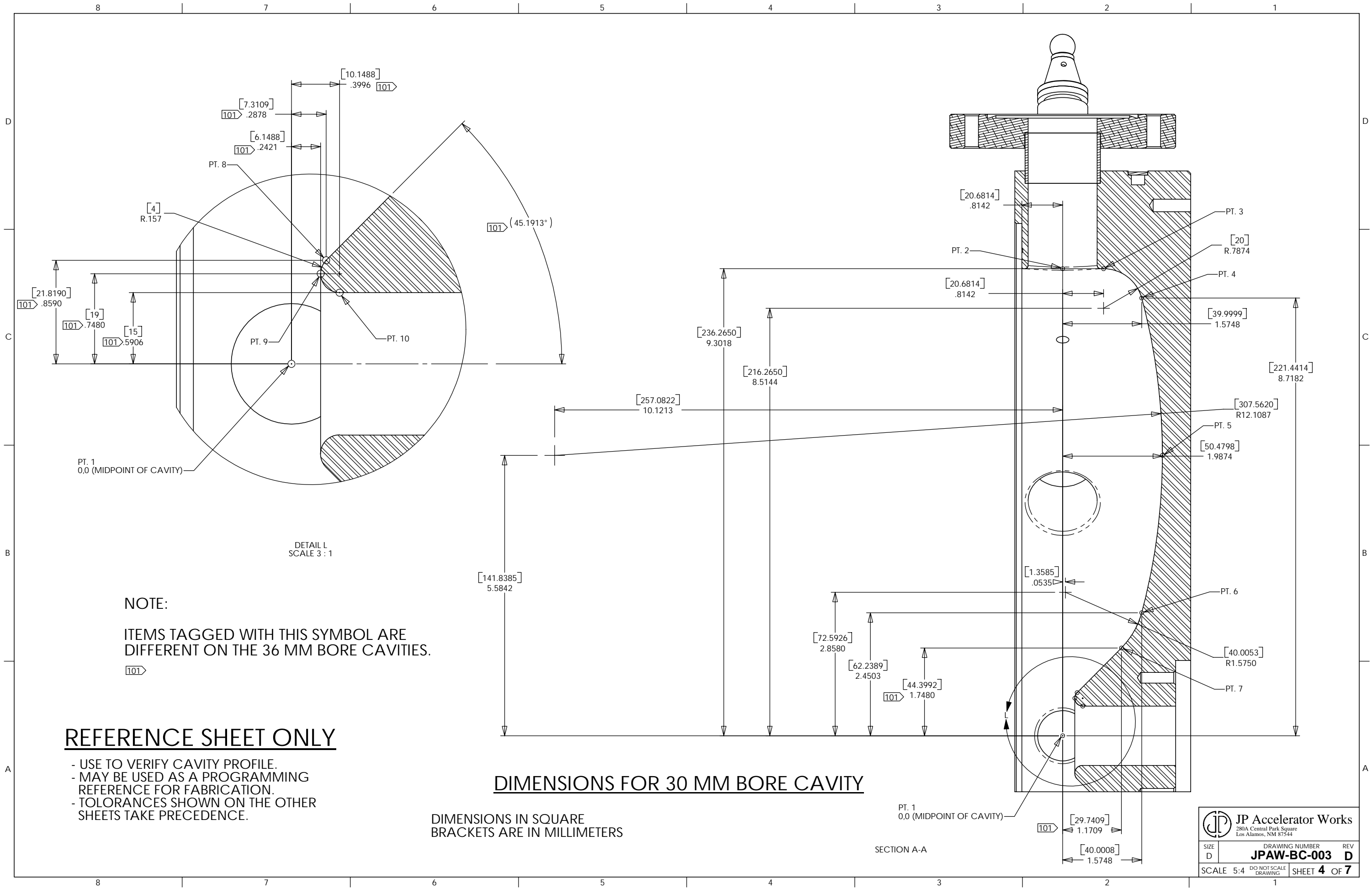
DIMENSIONS FOR 30 MM BORE CAVITY

NOTE:

ITEMS TAGGED WITH THIS SYMBOL ARE DIFFERENT ON THE 36 MM BORE CAVITIES.

[101]

 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-003	REV D
SCALE 5:4	DO NOT SCALE DRAWING	SHEET 3 OF 7



NOTE:
ITEMS TAGGED WITH THIS SYMBOL ARE
DIFFERENT ON THE 36 MM BORE CAVITIES.


REFERENCE SHEET ONLY

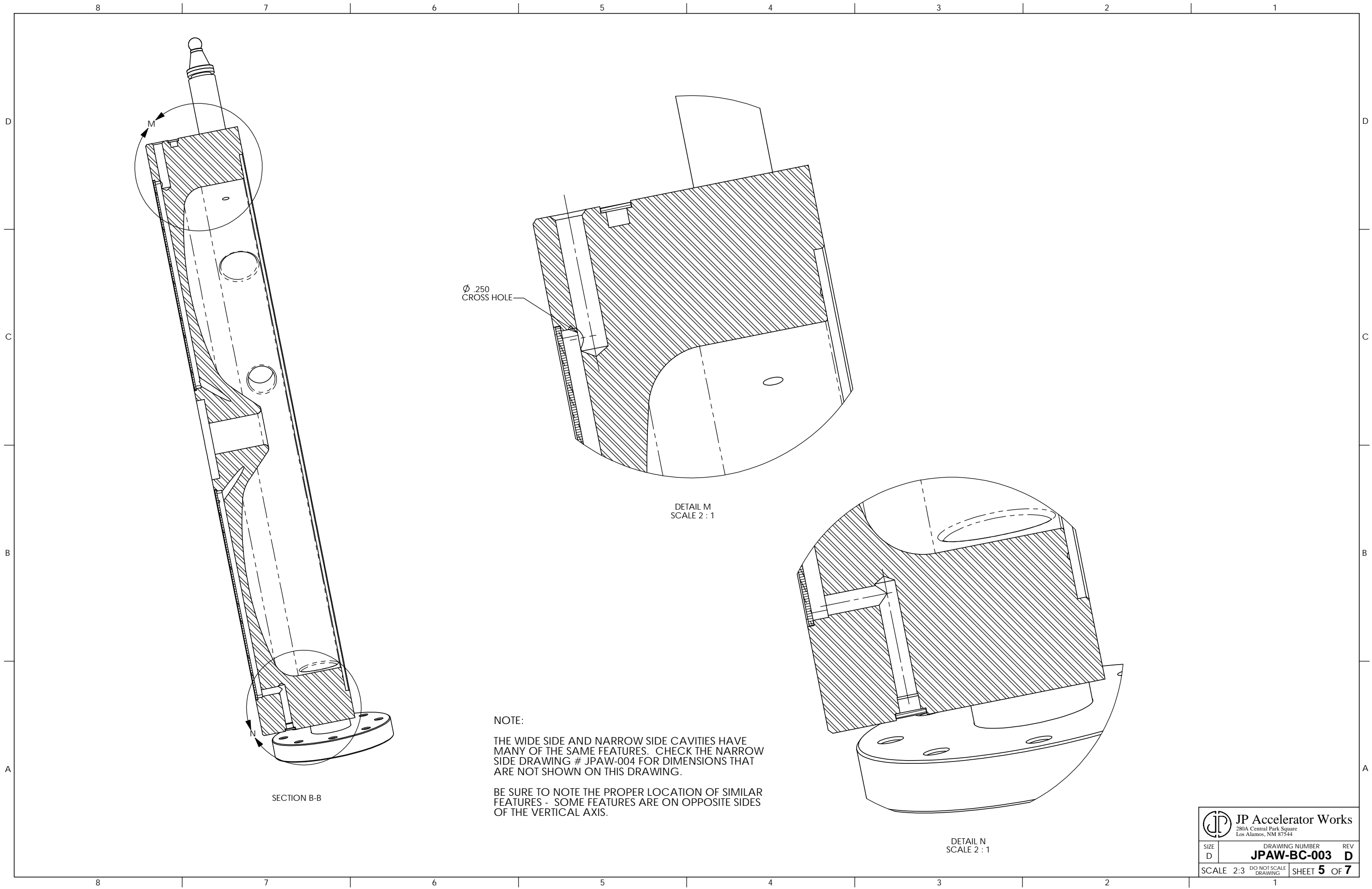
- USE TO VERIFY CAVITY PROFILE.
- MAY BE USED AS A PROGRAMMING REFERENCE FOR FABRICATION.
- TOLORANCES SHOWN ON THE OTHER SHEETS TAKE PRECEDENCE.


DIMENSIONS IN SQUARE
BRACKETS ARE IN MILLIMETERS

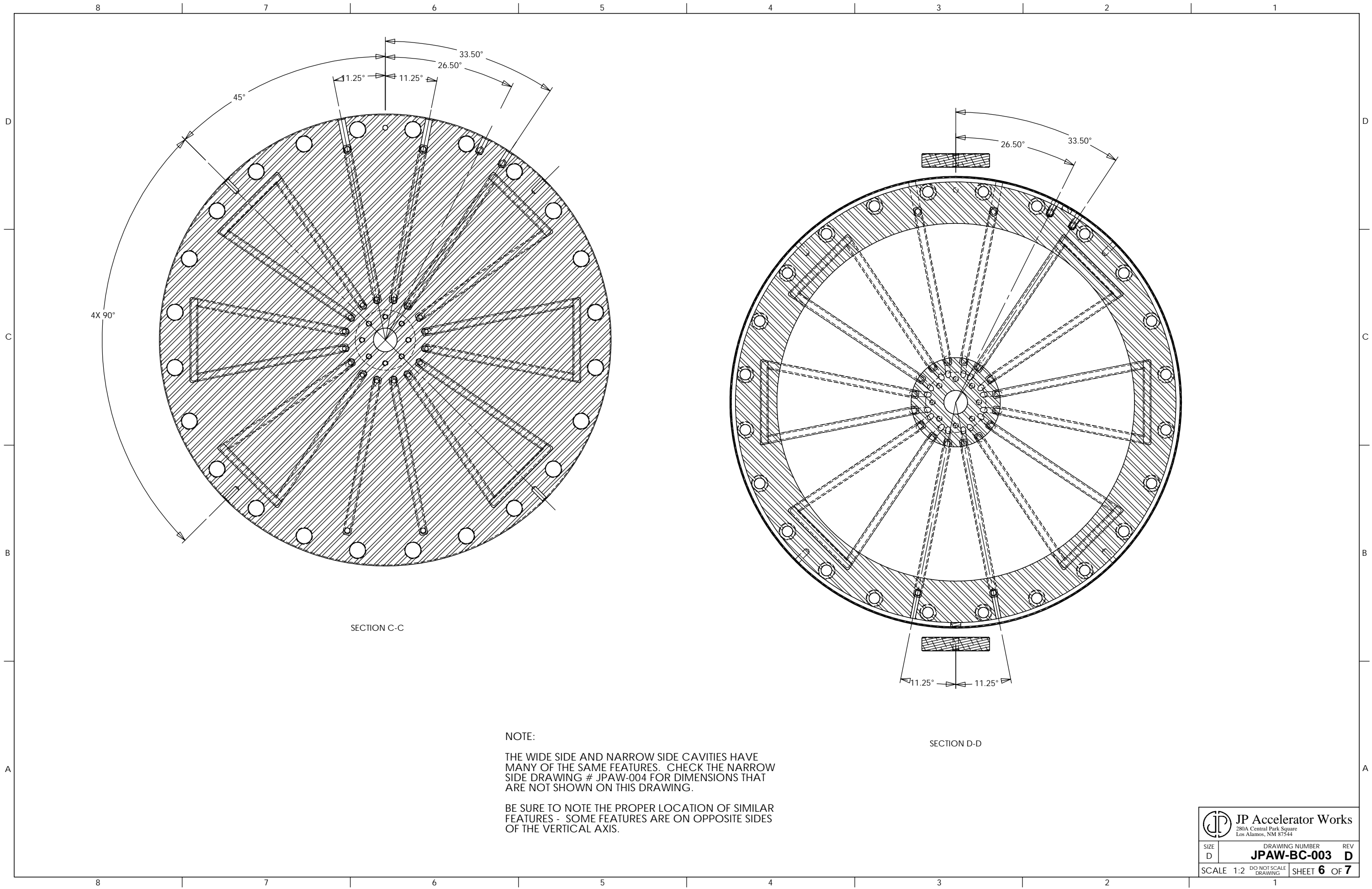
DIMENSIONS FOR 30 MM BORE CAVITY

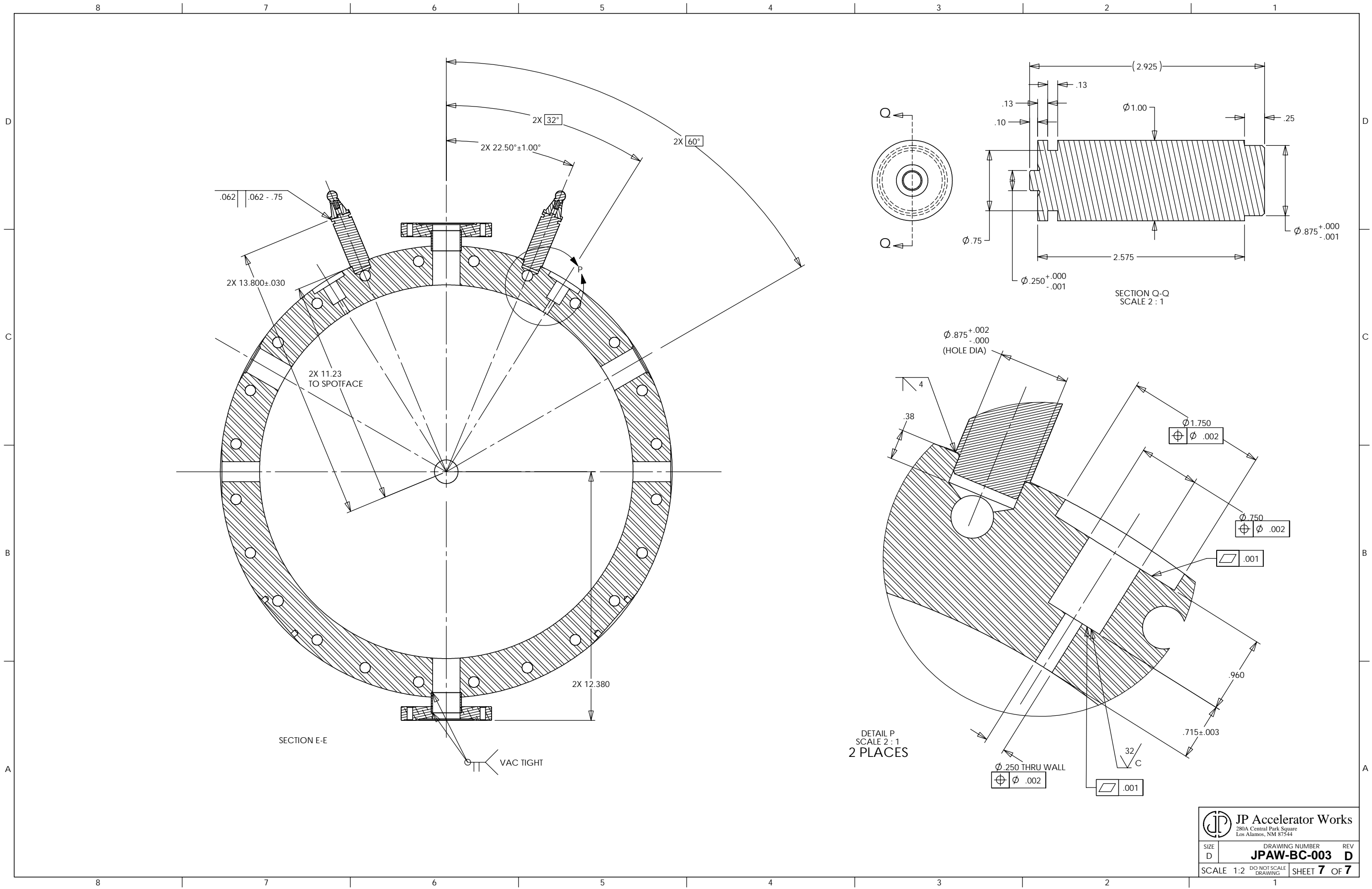
SECTION A-A

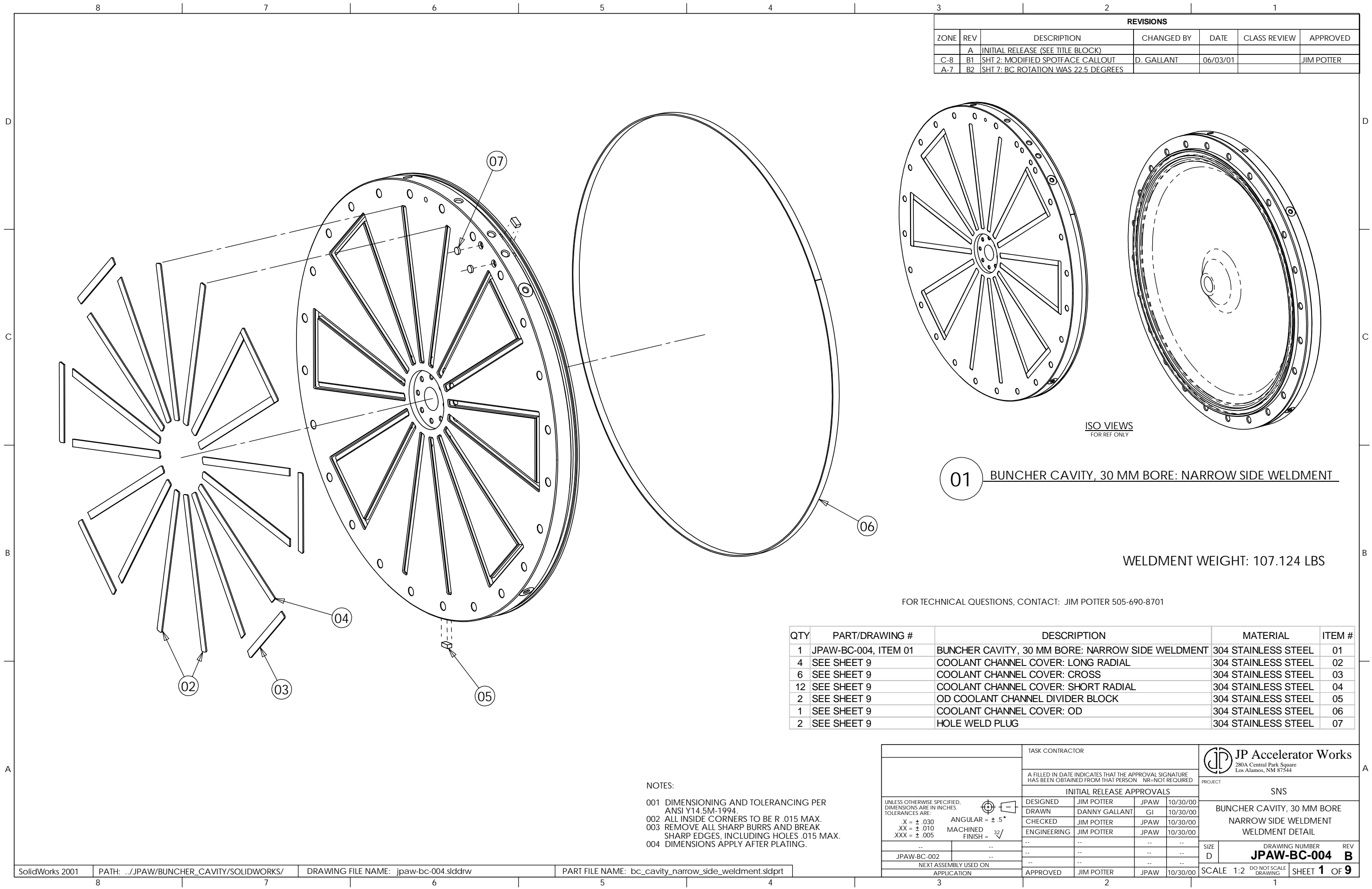
 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-003	REV D
SCALE 5:4	DO NOT SCALE DRAWING	SHEET 4 OF 7



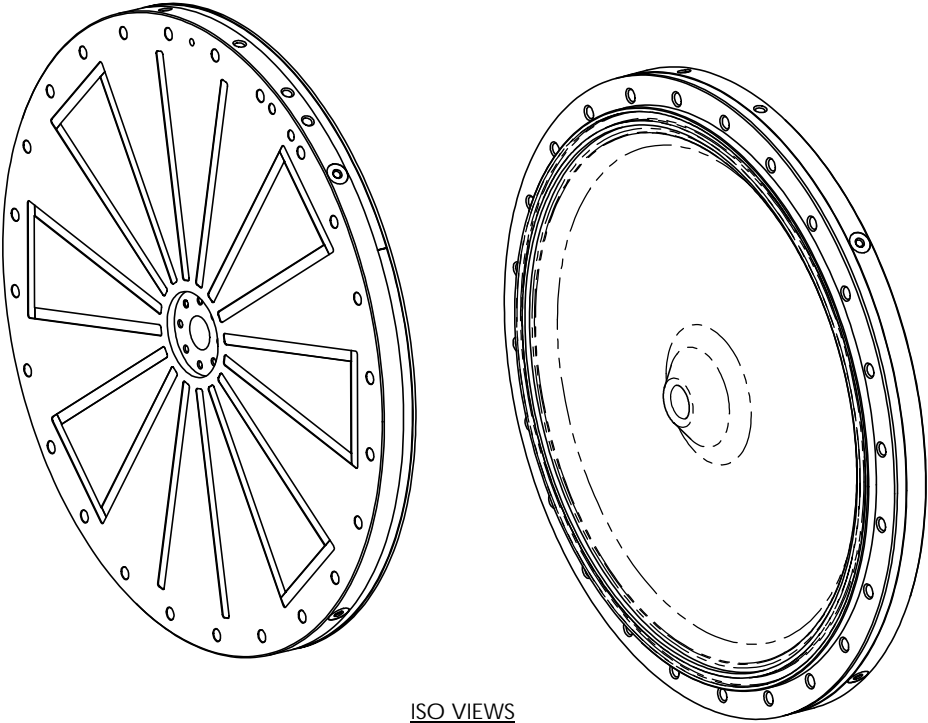
 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-003	REV D
SCALE 2:3	DO NOT SCALE DRAWING	SHEET 5 OF 7







REVISIONS						
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				
C-8	B1	SHT 2: MODIFIED SPOTFACE CALLOUT	D. GALLANT	06/03/01		JIM POTTER
A-7	B2	SHT 7: BC ROTATION WAS 22.5 DEGREES				




01 BUNCHER CAVITY, 30 MM BORE: NARROW SIDE WELDMENT

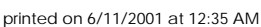
WELDMENT WEIGHT: 107.124 LBS

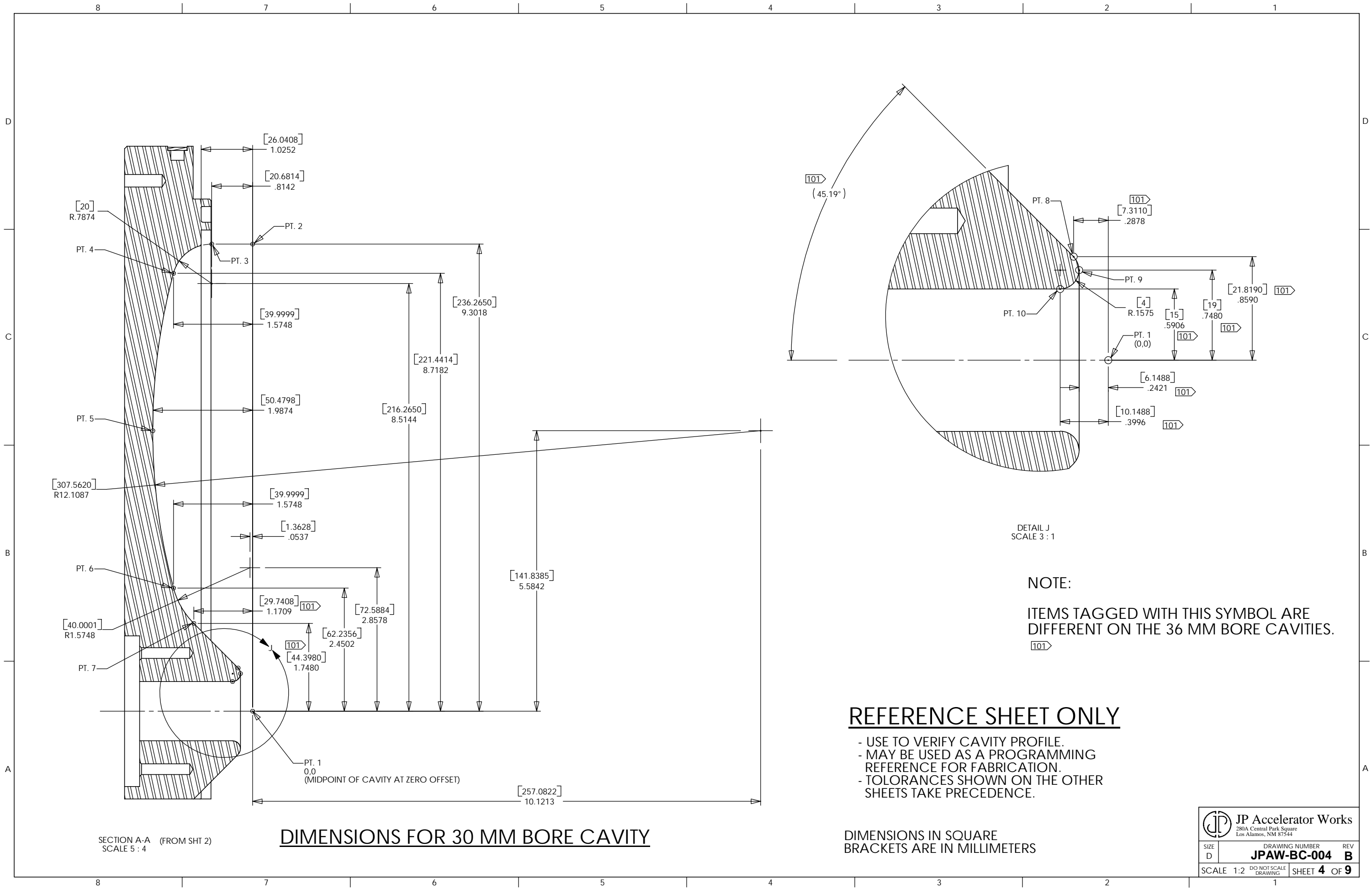
FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-004, ITEM 01	BUNCHER CAVITY, 30 MM BORE: NARROW SIDE WELDMENT	304 STAINLESS STEEL	01
4	SEE SHEET 9	COOLANT CHANNEL COVER: LONG RADIAL	304 STAINLESS STEEL	02
6	SEE SHEET 9	COOLANT CHANNEL COVER: CROSS	304 STAINLESS STEEL	03
12	SEE SHEET 9	COOLANT CHANNEL COVER: SHORT RADIAL	304 STAINLESS STEEL	04
2	SEE SHEET 9	OD COOLANT CHANNEL DIVIDER BLOCK	304 STAINLESS STEEL	05
1	SEE SHEET 9	COOLANT CHANNEL COVER: OD	304 STAINLESS STEEL	06
2	SEE SHEET 9	HOLE WELD PLUG	304 STAINLESS STEEL	07

- NOTES:
- 001 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
 - 002 ALL INSIDE CORNERS TO BE R.015 MAX.
 - 003 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.
 - 004 DIMENSIONS APPLY AFTER PLATING.

		TASK CONTRACTOR				<div> JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544</div>			
		A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR=NOT REQUIRED							
		INITIAL RELEASE APPROVALS							
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: .X = ± .030 .XX = ± .010 .XXX = ± .005 ANGULAR = ± .5° MACHINED FINISH = 32/		DESIGNED		JIM POTTER	JPAW	10/30/00	PROJECT	SNS	
		DRAWN		DANNY GALLANT	GI	10/30/00	BUNCHER CAVITY, 30 MM BORE		
		CHECKED		JIM POTTER	JPAW	10/30/00	NARROW SIDE WELDMENT		
		ENGINEERING		JIM POTTER	JPAW	10/30/00	WELDMENT DETAIL		
		--		--	--	--			
JPAW-BC-002		--		--	--	--	SIZE D	DRAWING NUMBER JPAW-BC-004	REV B
NEXT ASSEMBLY USED ON				--	--	--			
APPLICATION		APPROVED		JIM POTTER	JPAW	10/30/00	SCALE 1:2	DO NOT SCALE DRAWING	SHEET 1 OF 9





SECTION A-A (FROM SHT 2)
SCALE 5 : 4

DIMENSIONS FOR 30 MM BORE CAVITY


NOTE:
ITEMS TAGGED WITH THIS SYMBOL ARE
DIFFERENT ON THE 36 MM BORE CAVITIES.

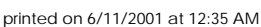


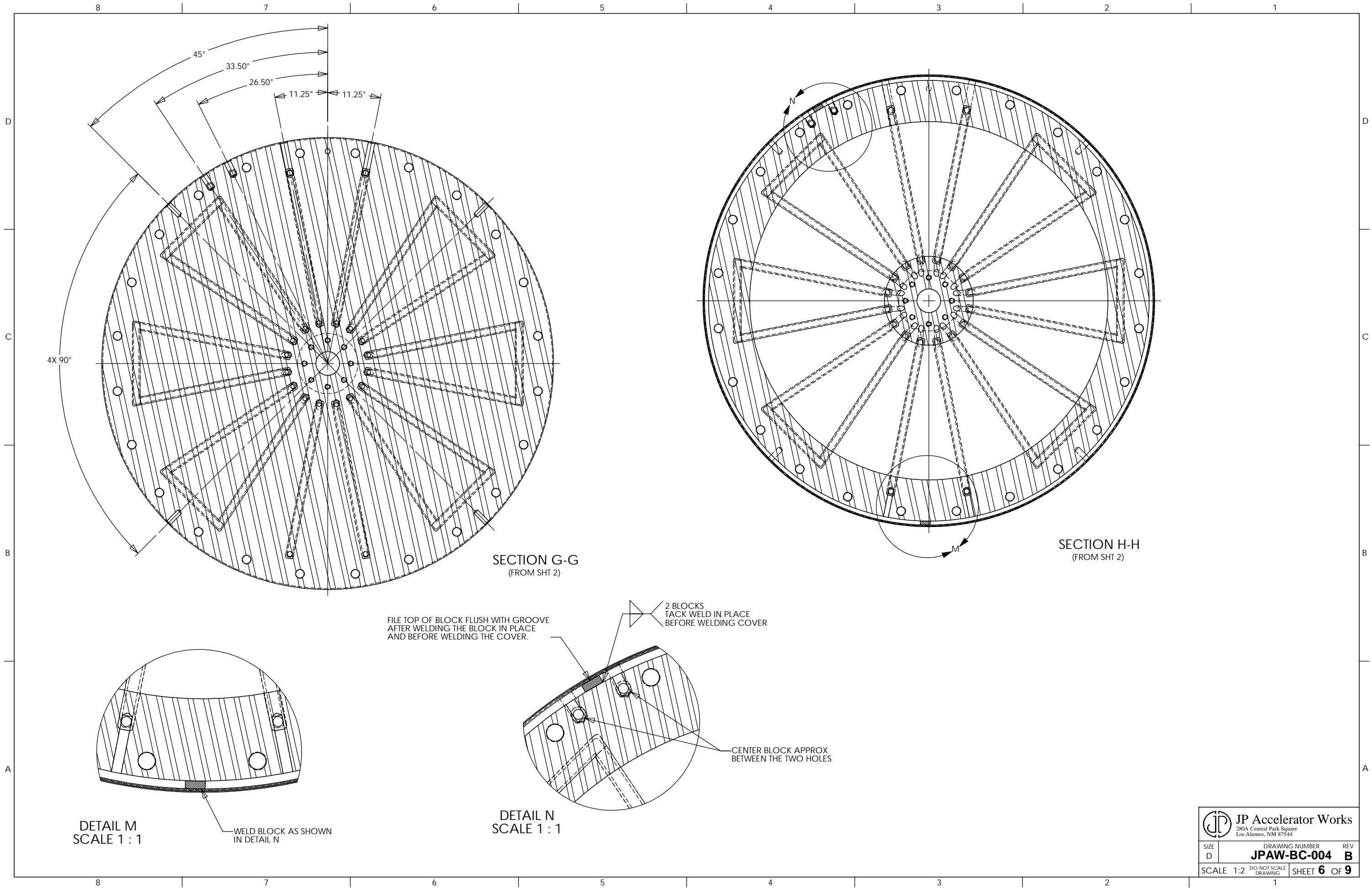
REFERENCE SHEET ONLY

- USE TO VERIFY CAVITY PROFILE.
- MAY BE USED AS A PROGRAMMING
REFERENCE FOR FABRICATION.
- TOLORANCES SHOWN ON THE OTHER
SHEETS TAKE PRECEDENCE.

DIMENSIONS IN SQUARE
BRACKETS ARE IN MILLIMETERS

 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-004	REV B
SCALE 1:2	DO NOT SCALE DRAWING	SHEET 4 OF 9





SECTION G-G
(FROM SHT 2)

SECTION H-H
(FROM SHT 2)

DETAIL M
SCALE 1 : 1


DETAIL N
SCALE 1 : 1

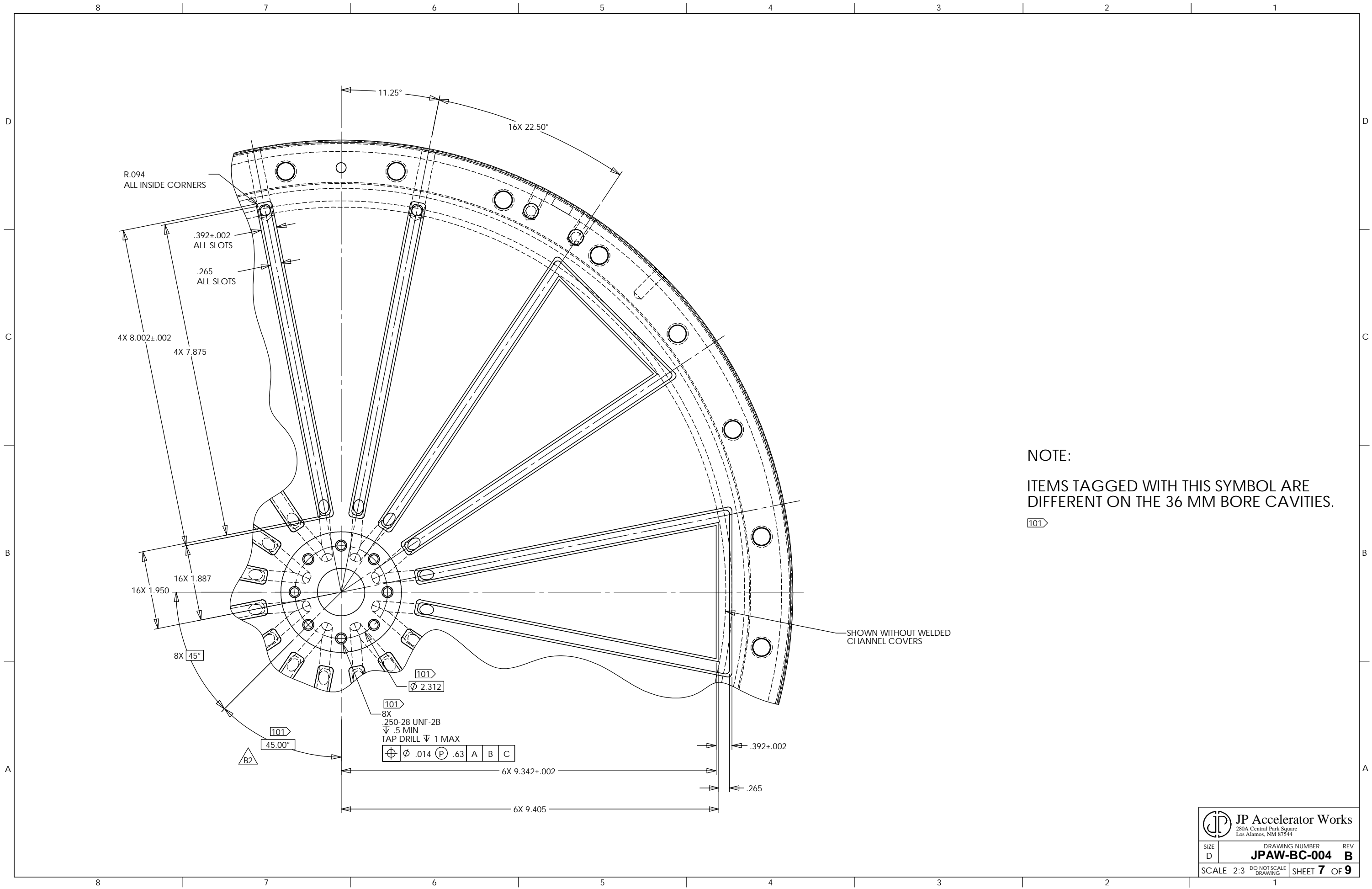
FILE TOP OF BLOCK FLUSH WITH GROOVE
AFTER WELDING THE BLOCK IN PLACE
AND BEFORE WELDING THE COVER.

2 BLOCKS
TACK WELD IN PLACE
BEFORE WELDING COVER

CENTER BLOCK APPROX
BETWEEN THE TWO HOLES

WELD BLOCK AS SHOWN
IN DETAIL N


 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-004	REV B
SCALE 1:2 DO NOT SCALE DRAWING	SHEET 6 OF 9	



NOTE:
ITEMS TAGGED WITH THIS SYMBOL ARE
DIFFERENT ON THE 36 MM BORE CAVITIES.

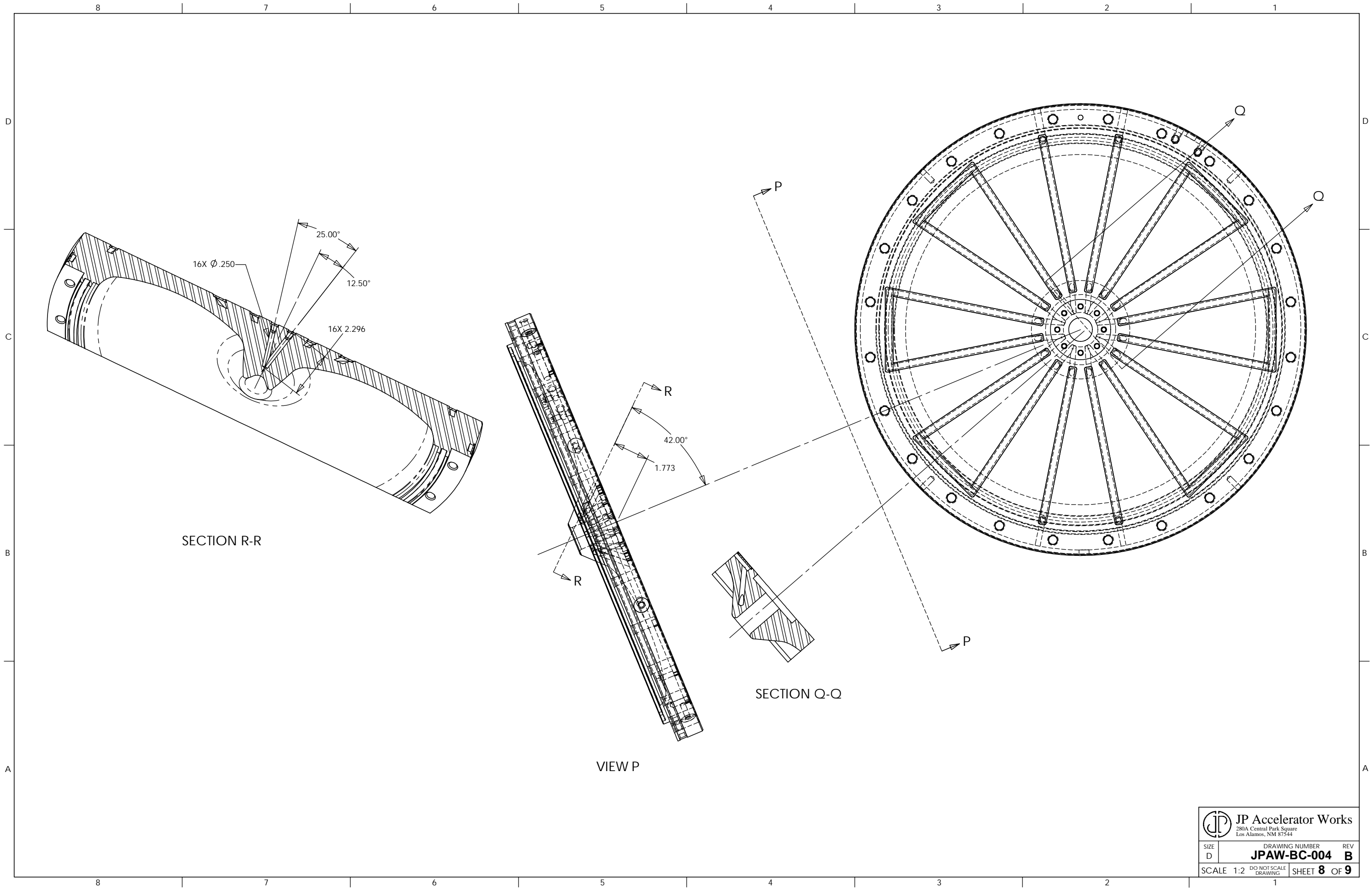
[Symbol]


[Symbol]			
Ø 2.312			
[Symbol]			
8X .250-28 UNF-2B			
TAP DRILL .5 MIN			
TAP DRILL 1 MAX			
Ø .014	P	.63	A B C

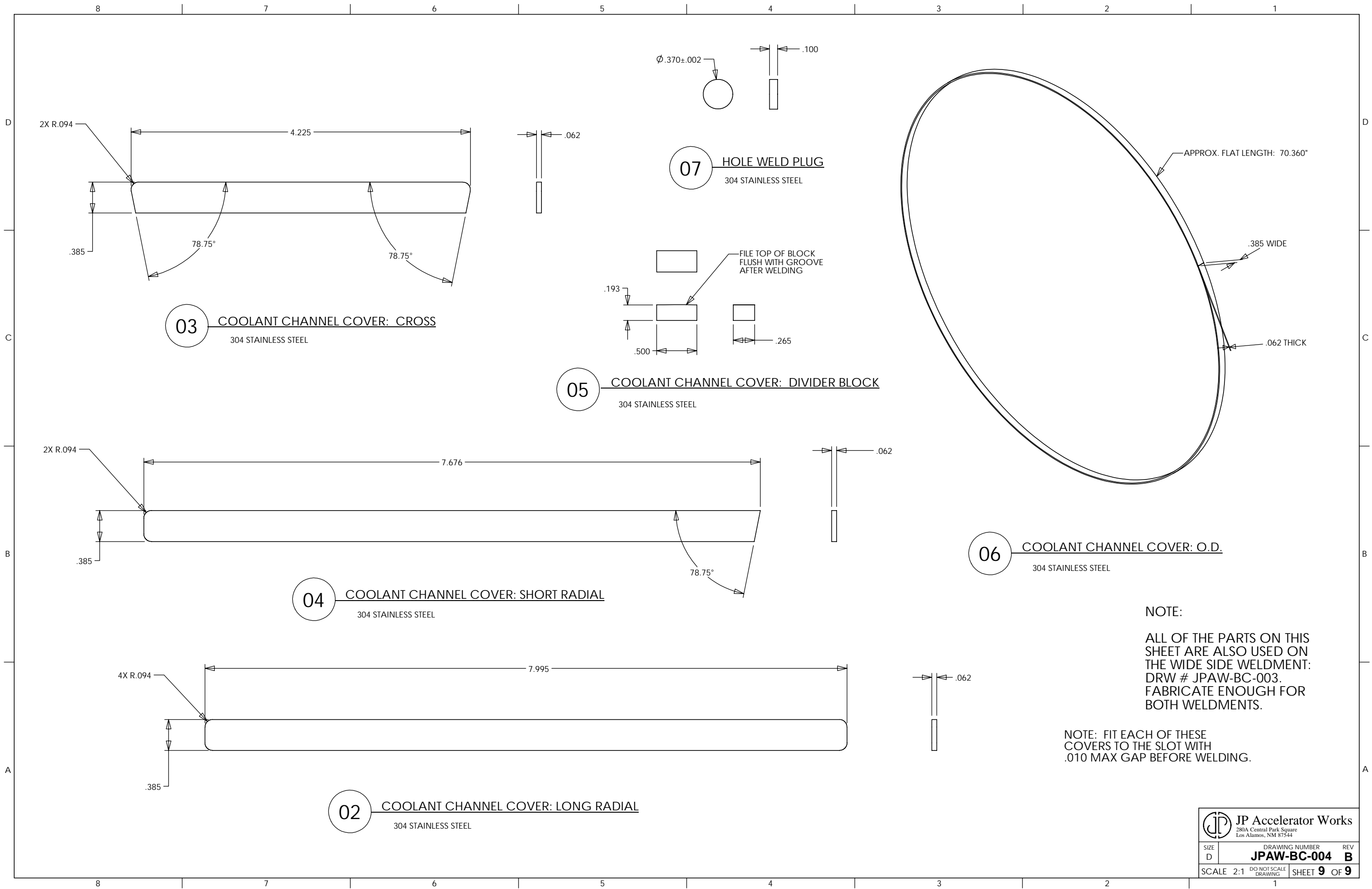


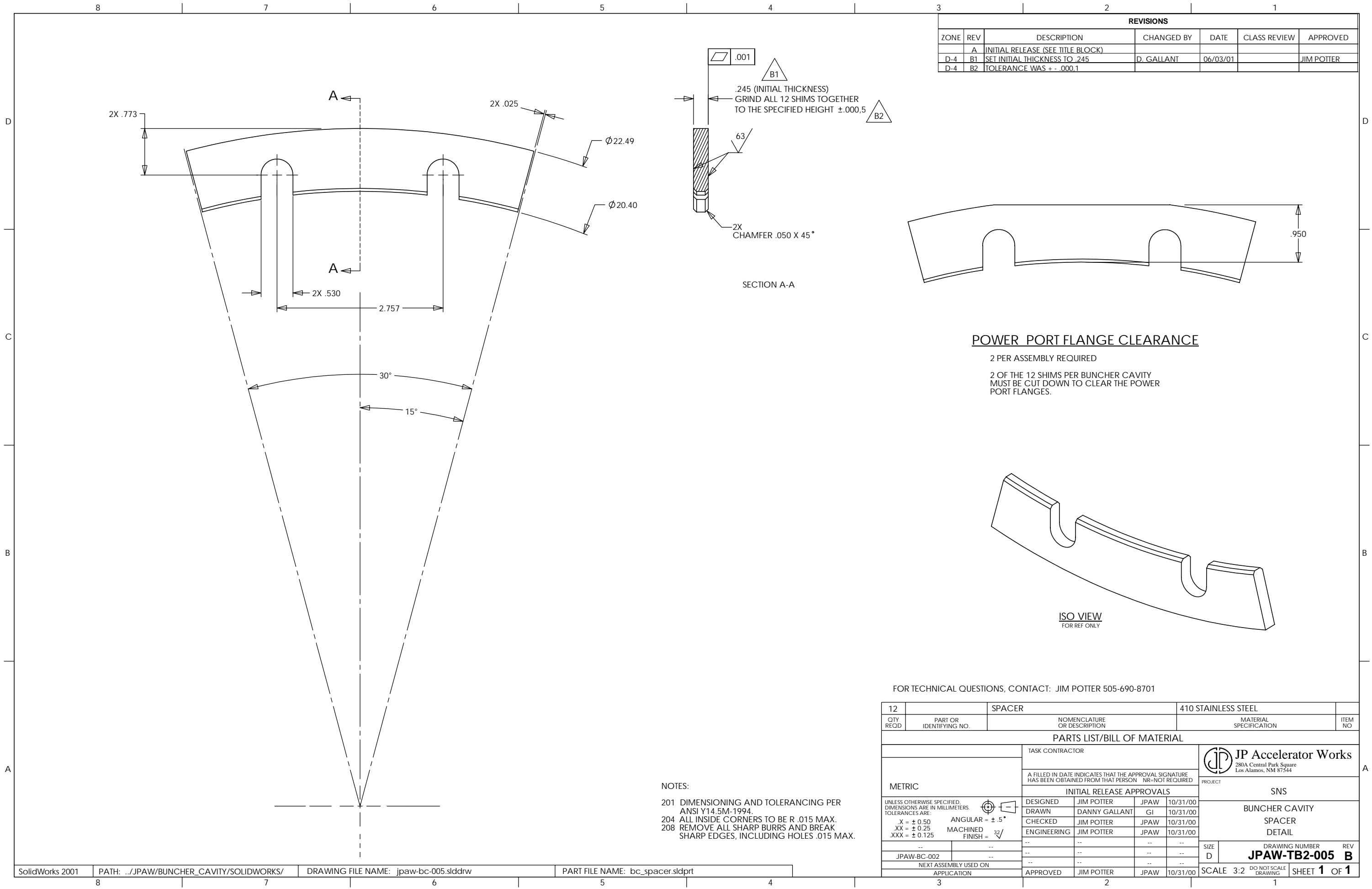
JP Accelerator Works
280A Central Park Square
Los Alamos, NM 87544

SIZE D	DRAWING NUMBER JPAW-BC-004	REV B
SCALE 2:3	DO NOT SCALE DRAWING	SHEET 7 OF 9

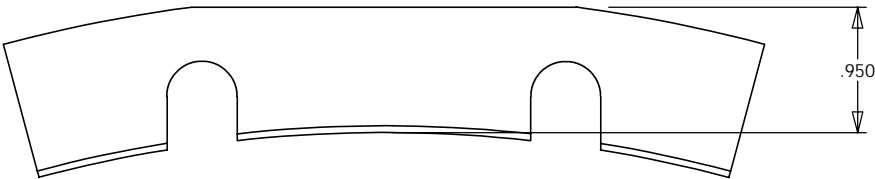


 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-004	REV B
SCALE 1:2	DO NOT SCALE DRAWING	SHEET 8 OF 9



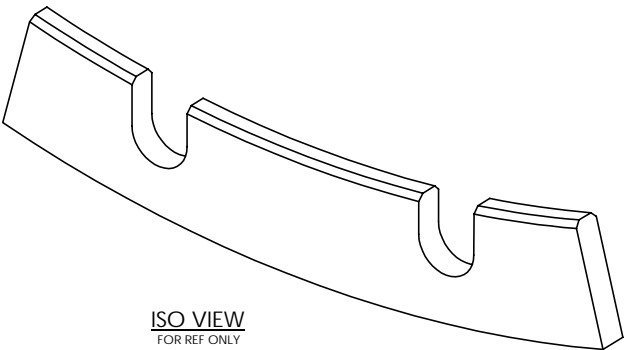


REVISIONS						
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				
D-4	B1	SET INITIAL THICKNESS TO .245	D. GALLANT	06/03/01		JIM POTTER
D-4	B2	TOLERANCE WAS + - .000,1				




POWER PORT FLANGE CLEARANCE

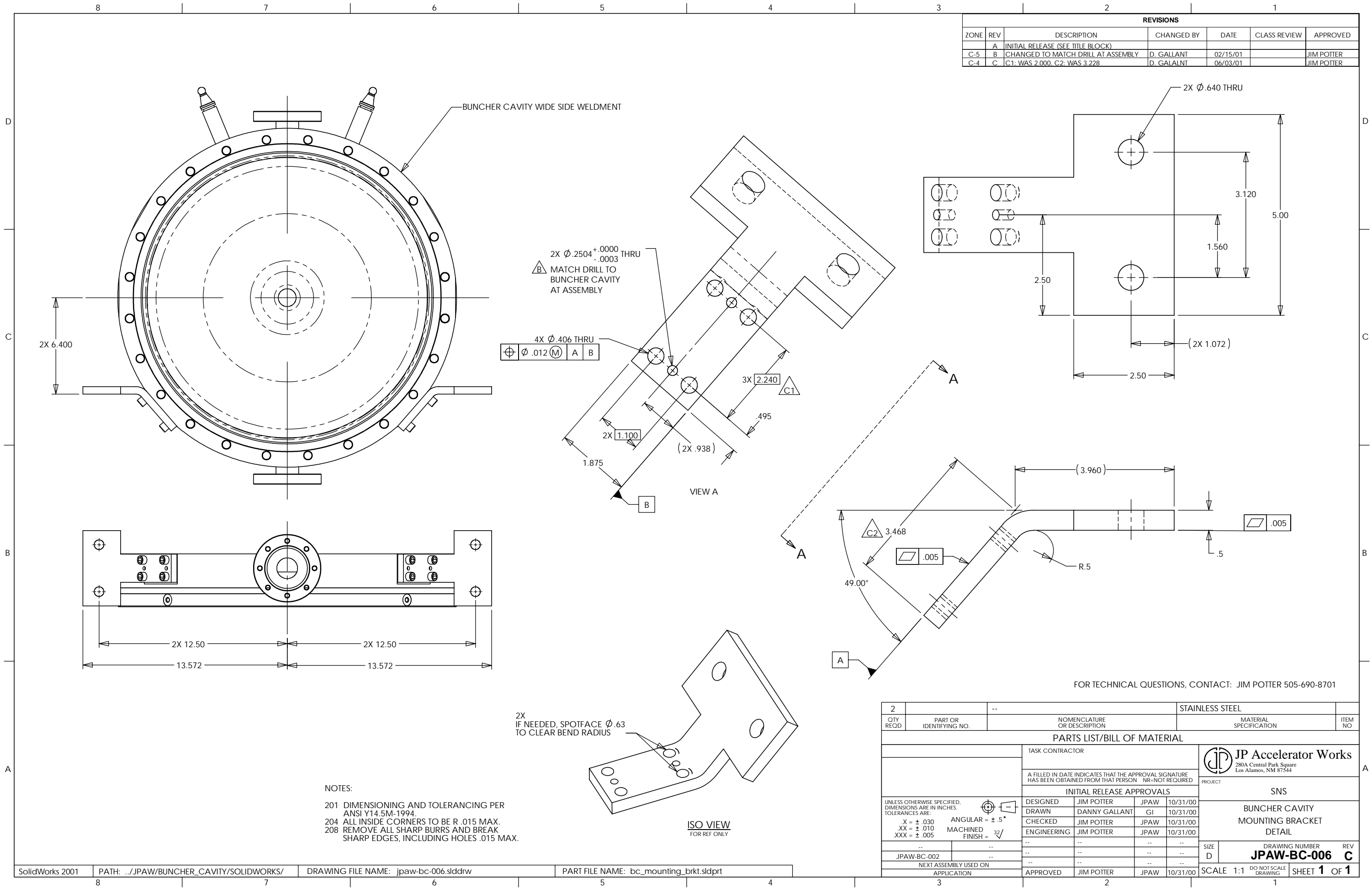
2 PER ASSEMBLY REQUIRED
2 OF THE 12 SHIMS PER BUNCHER CAVITY
MUST BE CUT DOWN TO CLEAR THE POWER
PORT FLANGES.



FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

12		SPACER		410 STAINLESS STEEL				
QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION		MATERIAL SPECIFICATION		ITEM NO		
PARTS LIST/BILL OF MATERIAL								
METRIC UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES ARE: .X = ± 0.50 .XX = ± 0.25 .XXX = ± 0.125 ANGULAR = ± .5° MACHINED FINISH = 32/		TASK CONTRACTOR				 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
		A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR-NOT REQUIRED					PROJECT	
		INITIAL RELEASE APPROVALS				SNS BUNCHER CAVITY SPACER DETAIL		
		DESIGNED	JIM POTTER	JPAW	10/31/00			
		DRAWN	DANNY GALLANT	GI	10/31/00			
CHECKED	JIM POTTER	JPAW	10/31/00					
ENGINEERING	JIM POTTER	JPAW	10/31/00					
--	--	--	--	SIZE D		DRAWING NUMBER JPAW-TB2-005 REV B		
JPAW-BC-002	--	--	--					
--	--	--	--					
NEXT ASSEMBLY USED ON		--	--	--	SCALE 3:2 DO NOT SCALE DRAWING		SHEET 1 OF 1	
APPLICATION		APPROVED	JIM POTTER	JPAW				10/31/00

NOTES:
201 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
204 ALL INSIDE CORNERS TO BE R .015 MAX.
208 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.





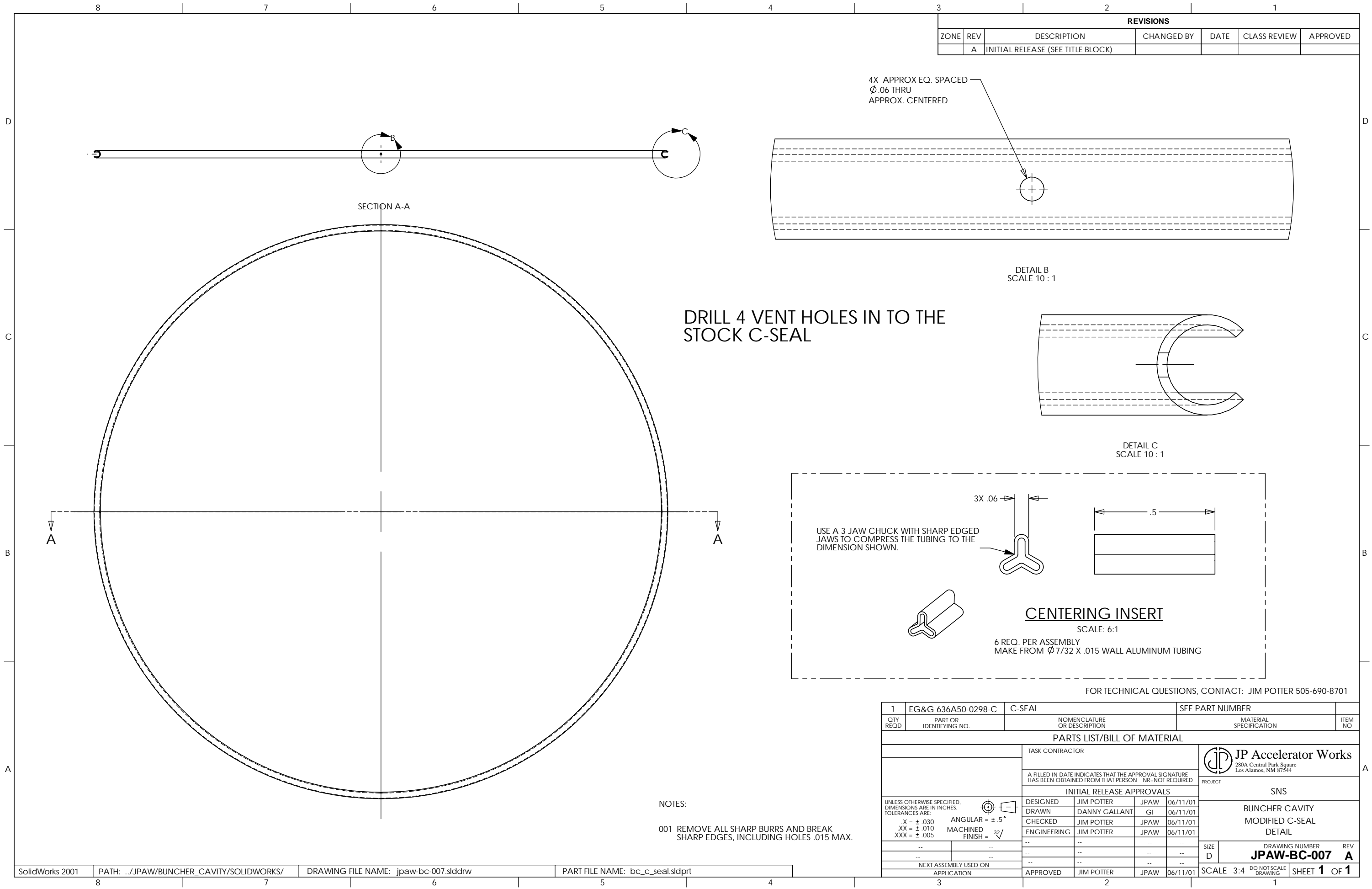
REVISIONS						
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				
C-5	B	CHANGED TO MATCH DRILL AT ASSEMBLY	D. GALLANT	02/15/01		JIM POTTER
C-4	C	C1: WAS 2.000, C2: WAS 3.228	D. GALALNT	06/03/01		JIM POTTER

NOTES:

- 201 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
204 ALL INSIDE CORNERS TO BE R .015 MAX.
208 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

2		--		STAINLESS STEEL					
QTY REQD		PART OR IDENTIFYING NO.		NOMENCLATURE OR DESCRIPTION		MATERIAL SPECIFICATION		ITEM NO	
PARTS LIST/BILL OF MATERIAL									
<div>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: X = ± .030 XX = ± .010 XXX = ± .005</div> <div>ANGULAR = ± .5° MACHINED FINISH = 32/</div> <div></div>				TASK CONTRACTOR				<div> JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544</div>	
				A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR=NOT REQUIRED					
				INITIAL RELEASE APPROVALS				PROJECT	
<div>DESIGNED</div> <div>DRAWN</div> <div>CHECKED</div> <div>ENGINEERING</div> <div>--</div> <div>JPAW-BC-002</div>				JIM POTTER		JPAW		10/31/00	
				DANNY GALLANT		GI		10/31/00	
				JIM POTTER		JPAW		10/31/00	
				JIM POTTER		JPAW		10/31/00	
				--		--		--	
NEXT ASSEMBLY USED ON APPLICATION				APPROVED		JIM POTTER		JPAW 10/31/00	
				SCALE 1:1		DO NOT SCALE DRAWING		SHEET 1 OF 1	



REVISIONS						
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				

4X APPROX EQ. SPACED
Ø.06 THRU
APPROX. CENTERED

DETAIL B
SCALE 10 : 1

DETAIL C
SCALE 10 : 1

DRILL 4 VENT HOLES IN TO THE
STOCK C-SEAL



USE A 3 JAW CHUCK WITH SHARP EDGED
JAWS TO COMPRESS THE TUBING TO THE
DIMENSION SHOWN.

CENTERING INSERT

SCALE: 6:1

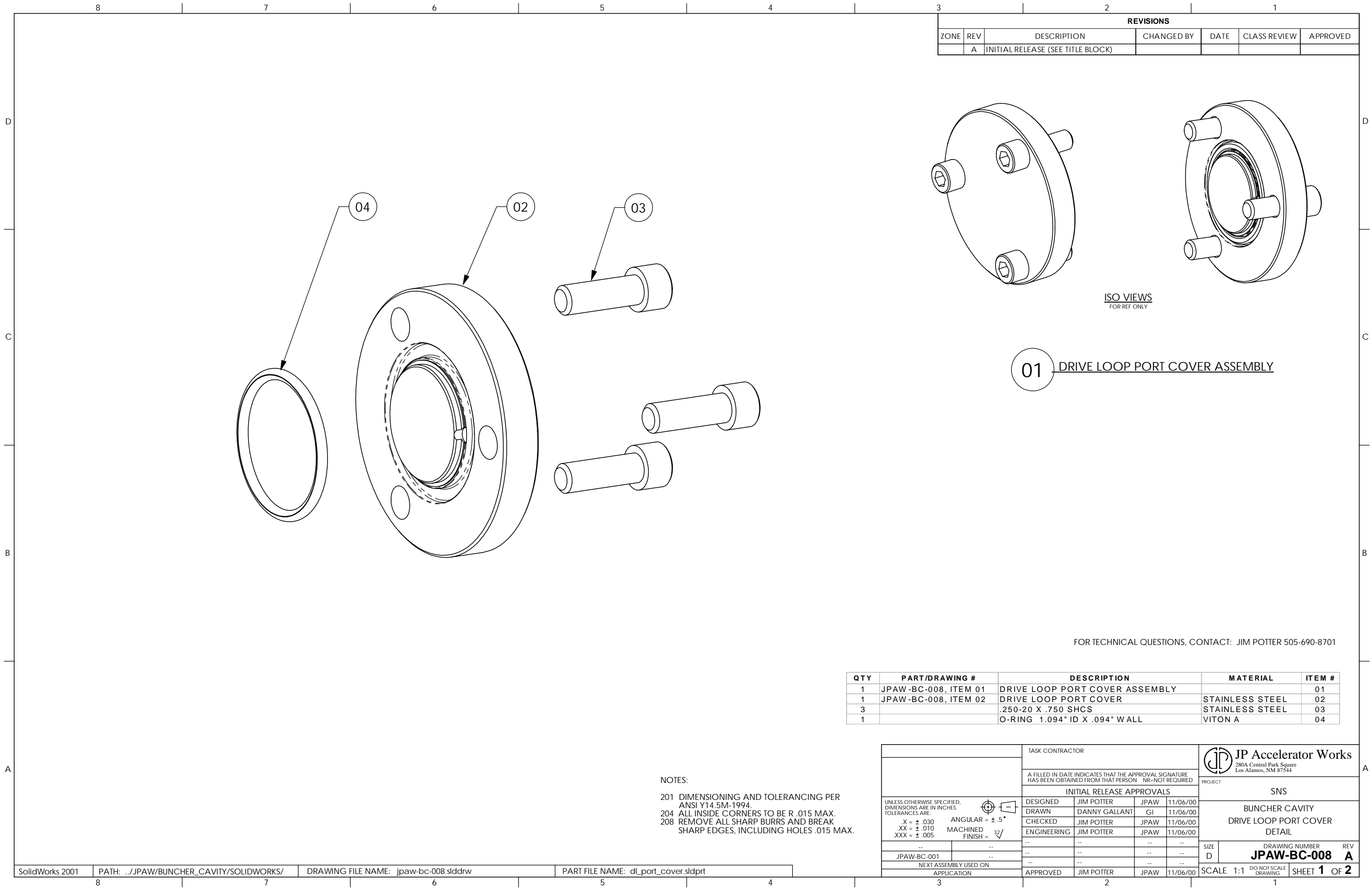
6 REQ. PER ASSEMBLY
MAKE FROM Ø 7/32 X .015 WALL ALUMINUM TUBING

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

1		EG&G 636A50-0298-C		C-SEAL		SEE PART NUMBER					
QTY REQD		PART OR IDENTIFYING NO.		NOMENCLATURE OR DESCRIPTION		MATERIAL SPECIFICATION		ITEM NO			
PARTS LIST/BILL OF MATERIAL											
<div>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: X = ± .030 XX = ± .010 XXX = ± .005</div> <div> ANGULAR = ± .5° MACHINED FINISH = 32/</div>				TASK CONTRACTOR				 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544			
				A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR=NOT REQUIRED							
				INITIAL RELEASE APPROVALS				PROJECT		SNS	
				DESIGNED				JIM POTTER		JPAW	
DRAWN				DANNY GALLANT		GI		06/11/01			
CHECKED				JIM POTTER		JPAW		06/11/01			
ENGINEERING				JIM POTTER		JPAW		06/11/01			
..						
..						
..						
NEXT ASSEMBLY USED ON				APPROVED		JIM POTTER		JPAW 06/11/01			
APPLICATION				APPROVED		JIM POTTER		JPAW 06/11/01			
				SCALE 3:4		DO NOT SCALE DRAWING		SHEET 1 OF 1			

NOTES:

001 REMOVE ALL SHARP BURRS AND BREAK
SHARP EDGES, INCLUDING HOLES .015 MAX.



REVISIONS						
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				

ISO VIEWS
FOR REF ONLY

01 DRIVE LOOP PORT COVER ASSEMBLY

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701



QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-008, ITEM 01	DRIVE LOOP PORT COVER ASSEMBLY		01
1	JPAW-BC-008, ITEM 02	DRIVE LOOP PORT COVER	STAINLESS STEEL	02
3		.250-20 X .750 SHCS	STAINLESS STEEL	03
1		O-RING 1.094" ID X .094" W WALL	VITON A	04

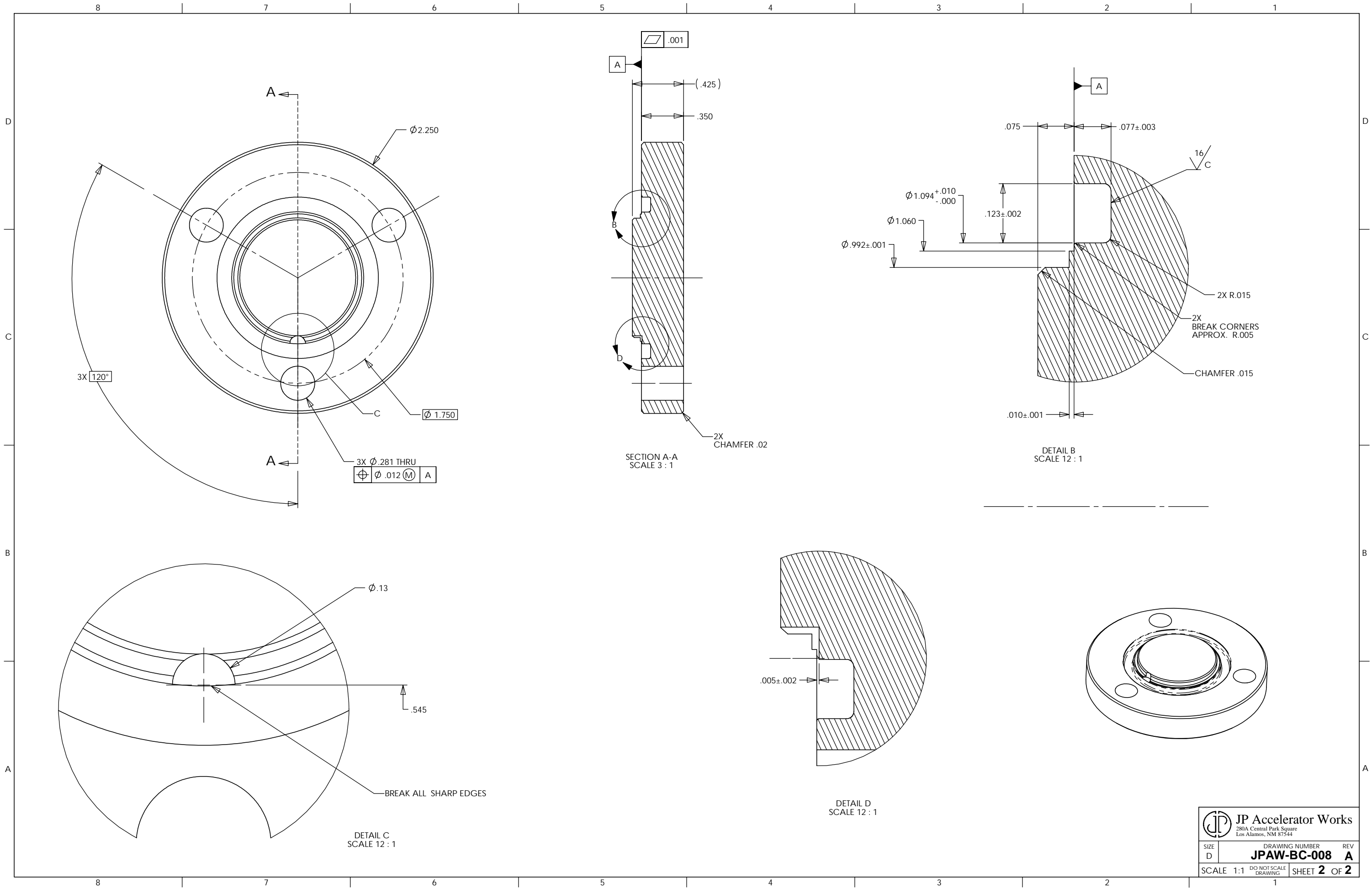
NOTES:

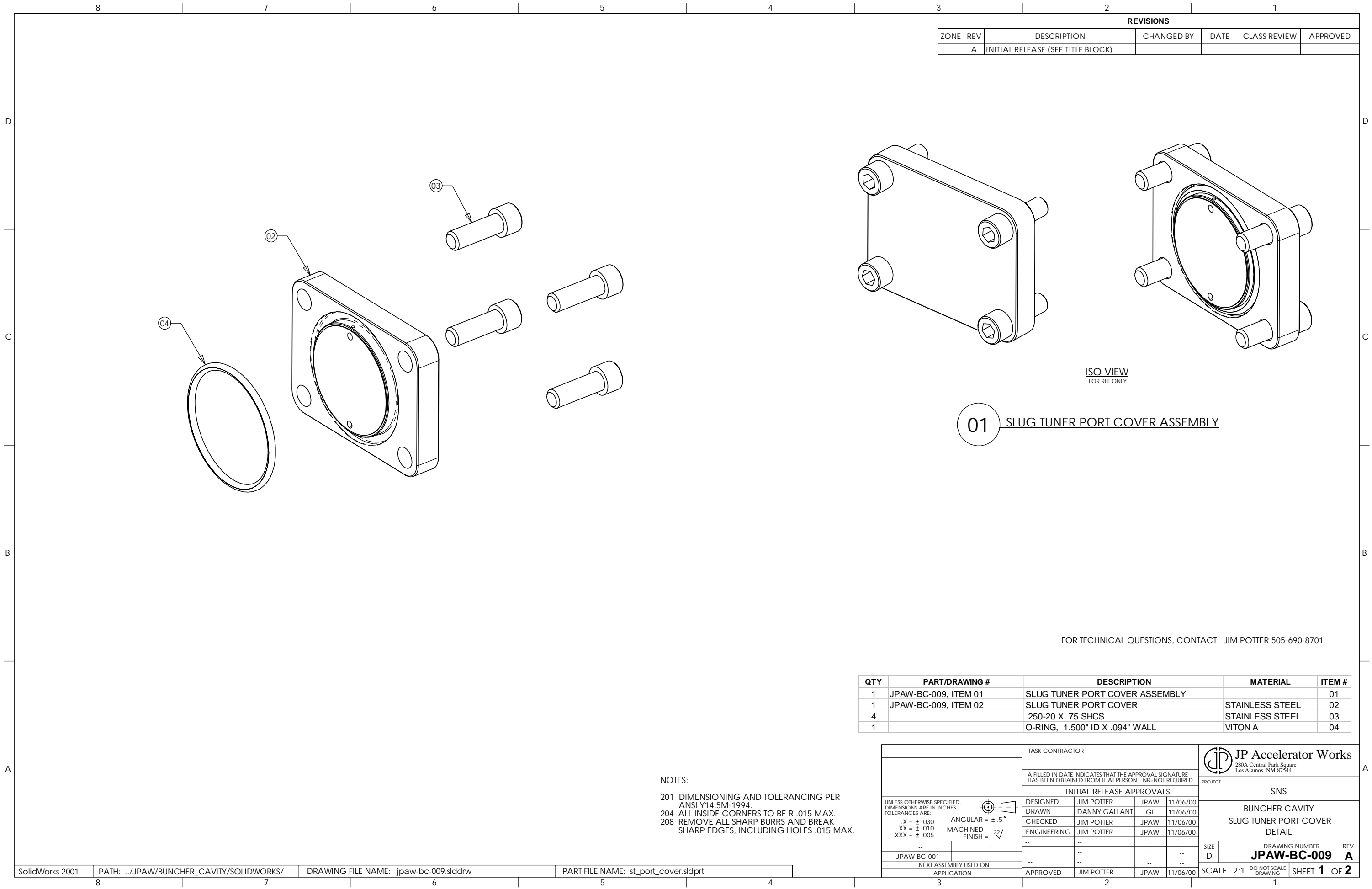
201 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.

204 ALL INSIDE CORNERS TO BE R .015 MAX.

208 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.

<div>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: .X = ± .030 .XX = ± .010 .XXX = ± .005</div>		<div></div> <div>ANGULAR = ± .5° MACHINED FINISH = 32/</div>	TASK CONTRACTOR				<div> JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544</div>		
			A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR-NOT REQUIRED						
			INITIAL RELEASE APPROVALS						
			DESIGNED	JIM POTTER	JPAW	11/06/00	PROJECT SNS		
			DRAWN	DANNY GALLANT	GI	11/06/00	BUNCHER CAVITY DRIVE LOOP PORT COVER DETAIL		
			CHECKED	JIM POTTER	JPAW	11/06/00			
			ENGINEERING	JIM POTTER	JPAW	11/06/00			
			--	--	--	--			
			--	--	--	--			
			--	--	--	--			
JPAW-BC-001		--					SIZE D	DRAWING NUMBER JPAW-BC-008	REV A
NEXT ASSEMBLY USED ON APPLICATION						APPROVED	JIM POTTER	JPAW	11/06/00
						SCALE 1:1 DO NOT SCALE DRAWING		SHEET 1 OF 2	





REVISIONS						
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				



ISO VIEW
FOR REF ONLY

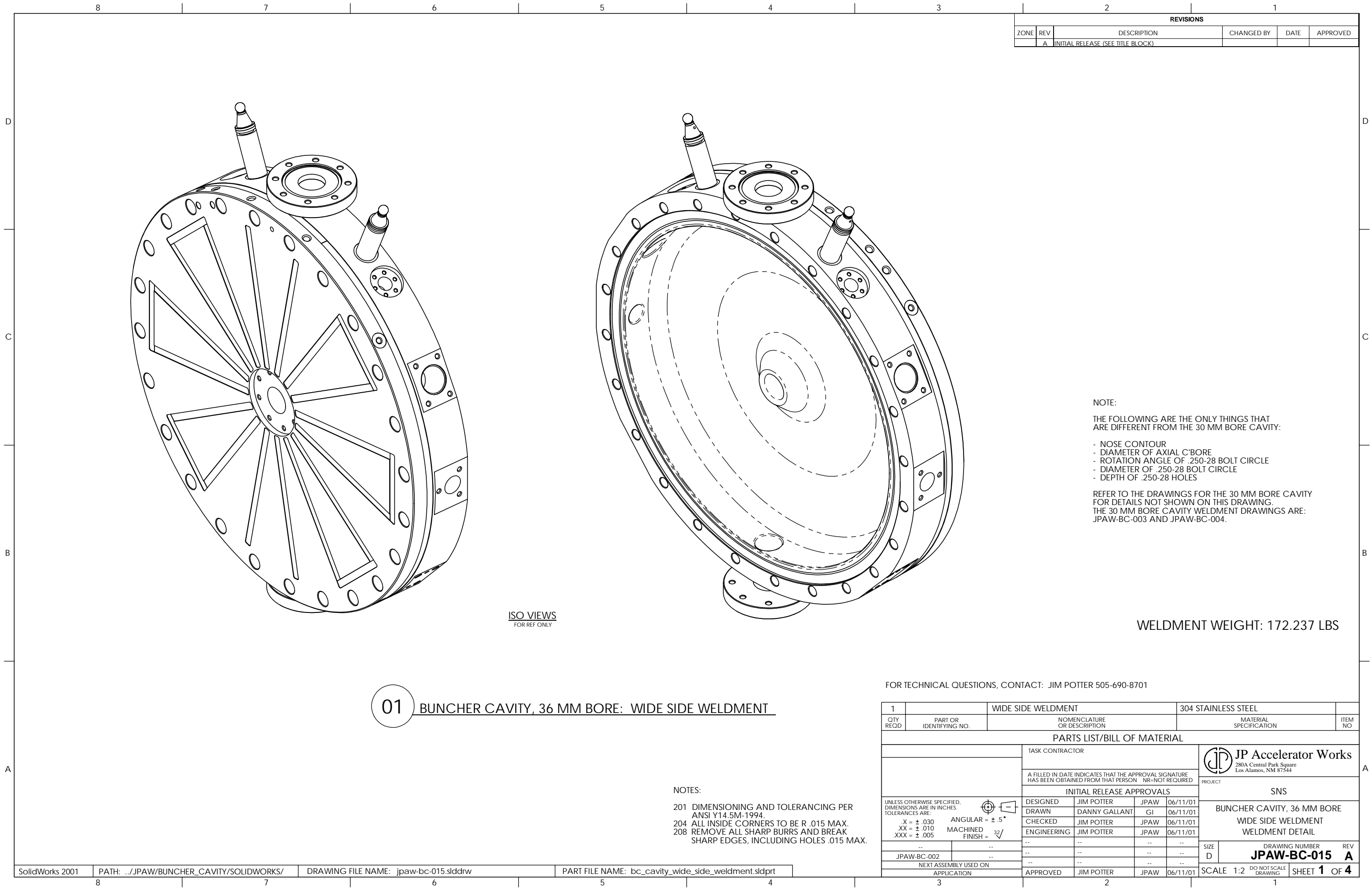
01 SLUG TUNER PORT COVER ASSEMBLY

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-009, ITEM 01	SLUG TUNER PORT COVER ASSEMBLY		01
1	JPAW-BC-009, ITEM 02	SLUG TUNER PORT COVER	STAINLESS STEEL	02
4		.250-20 X .75 SHCS	STAINLESS STEEL	03
1		O-RING, 1.500" ID X .094" WALL	VITON A	04

NOTES:
201 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
204 ALL INSIDE CORNERS TO BE R .015 MAX.
208 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.

<div>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: .X = ± .030 .XX = ± .010 .XXX = ± .005</div> <div> ANGULAR = ± .5° MACHINED FINISH = 32/</div>		TASK CONTRACTOR				<div>JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544</div>			
		A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR-NOT REQUIRED							
		INITIAL RELEASE APPROVALS				PROJECT			
				SNS					
				BUNCHER CAVITY					
				SLUG TUNER PORT COVER					
				DETAIL					
--		--		SIZE		DRAWING NUMBER		REV	
JPAW-BC-001		--		D		JPAW-BC-009		A	
NEXT ASSEMBLY USED ON				SCALE 2:1 DO NOT SCALE					
APPLICATION				DRAWING					
				APPROVED		JIM POTTER		JPAW 11/06/00	
				SCALE		2:1		SHEET 1 OF 2	



REVISIONS					
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)			

NOTE:

THE FOLLOWING ARE THE ONLY THINGS THAT ARE DIFFERENT FROM THE 30 MM BORE CAVITY:



- NOSE CONTOUR
- DIAMETER OF AXIAL C'BORE
- ROTATION ANGLE OF .250-28 BOLT CIRCLE
- DIAMETER OF .250-28 BOLT CIRCLE
- DEPTH OF .250-28 HOLES

REFER TO THE DRAWINGS FOR THE 30 MM BORE CAVITY FOR DETAILS NOT SHOWN ON THIS DRAWING. THE 30 MM BORE CAVITY WELDMENT DRAWINGS ARE: JPAW-BC-003 AND JPAW-BC-004.

WELDMENT WEIGHT: 172.237 LBS

01 BUNCHER CAVITY, 36 MM BORE: WIDE SIDE WELDMENT

FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

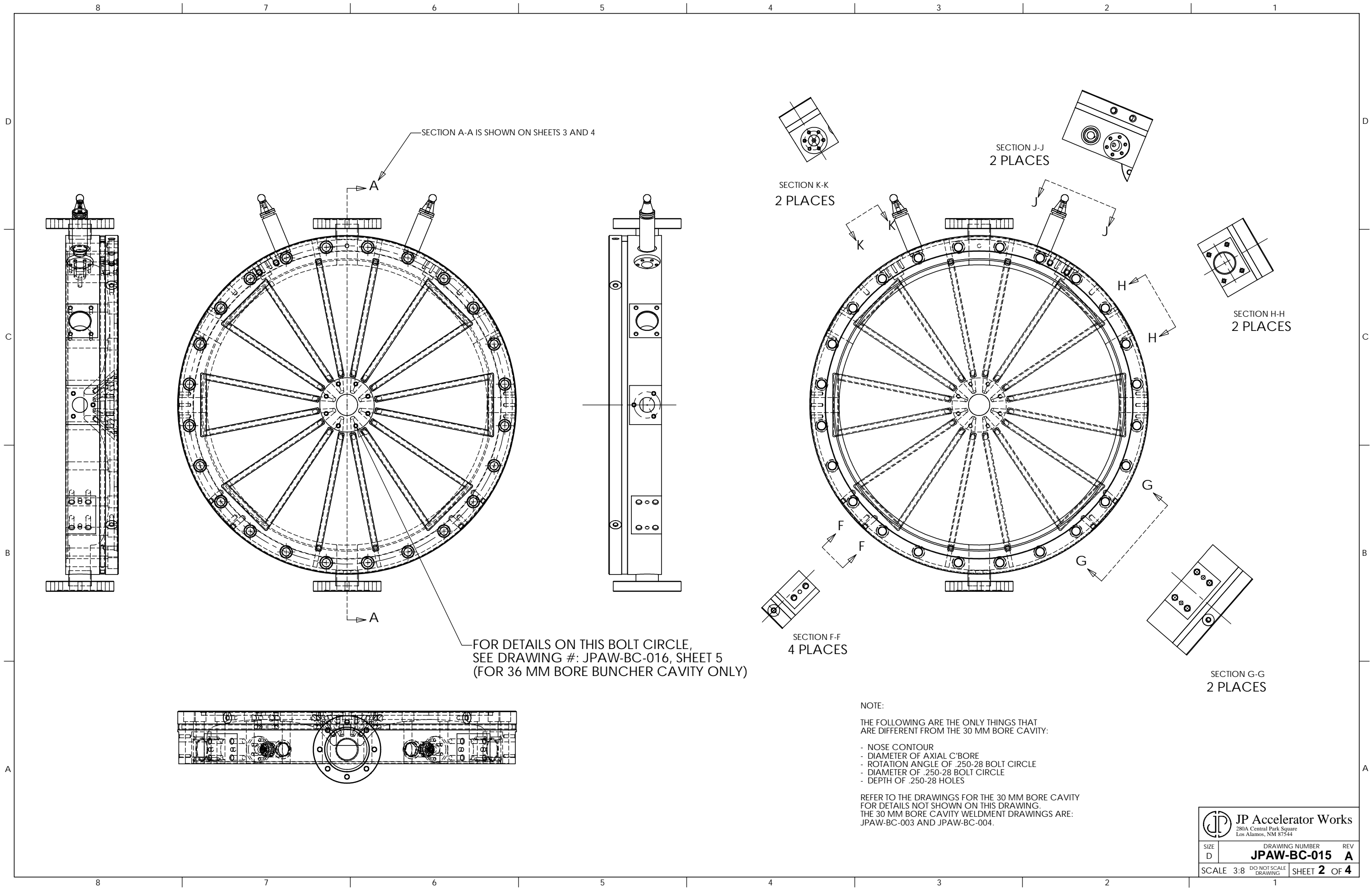
1		WIDE SIDE WELDMENT			304 STAINLESS STEEL				
QTY REQD		PART OR IDENTIFYING NO.		NOMENCLATURE OR DESCRIPTION			MATERIAL SPECIFICATION		ITEM NO
PARTS LIST/BILL OF MATERIAL									
				TASK CONTRACTOR			<div> JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544</div>		
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: X = ± .030 XX = ± .010 XXX = ± .005							PROJECT		
				INITIAL RELEASE APPROVALS			SNS		
				DESIGNED			JIM POTTER	JPAW	06/11/01
DRAWN			DANNY GALLANT	GI	06/11/01	WIDE SIDE WELDMENT			
CHECKED			JIM POTTER	JPAW	06/11/01				WELDMENT DETAIL
ENGINEERING			JIM POTTER	JPAW	06/11/01	SIZE D			
--			--	--	--				DRAWING NUMBER
JPAW-BC-002			--	--	--	JPAW-BC-015			
NEXT ASSEMBLY USED ON			--	--	--				REV
APPLICATION			APPROVED	JIM POTTER	JPAW	06/11/01	SCALE 1:2 DO NOT SCALE DRAWING		
						SHEET 1 OF 4			


NOTES:

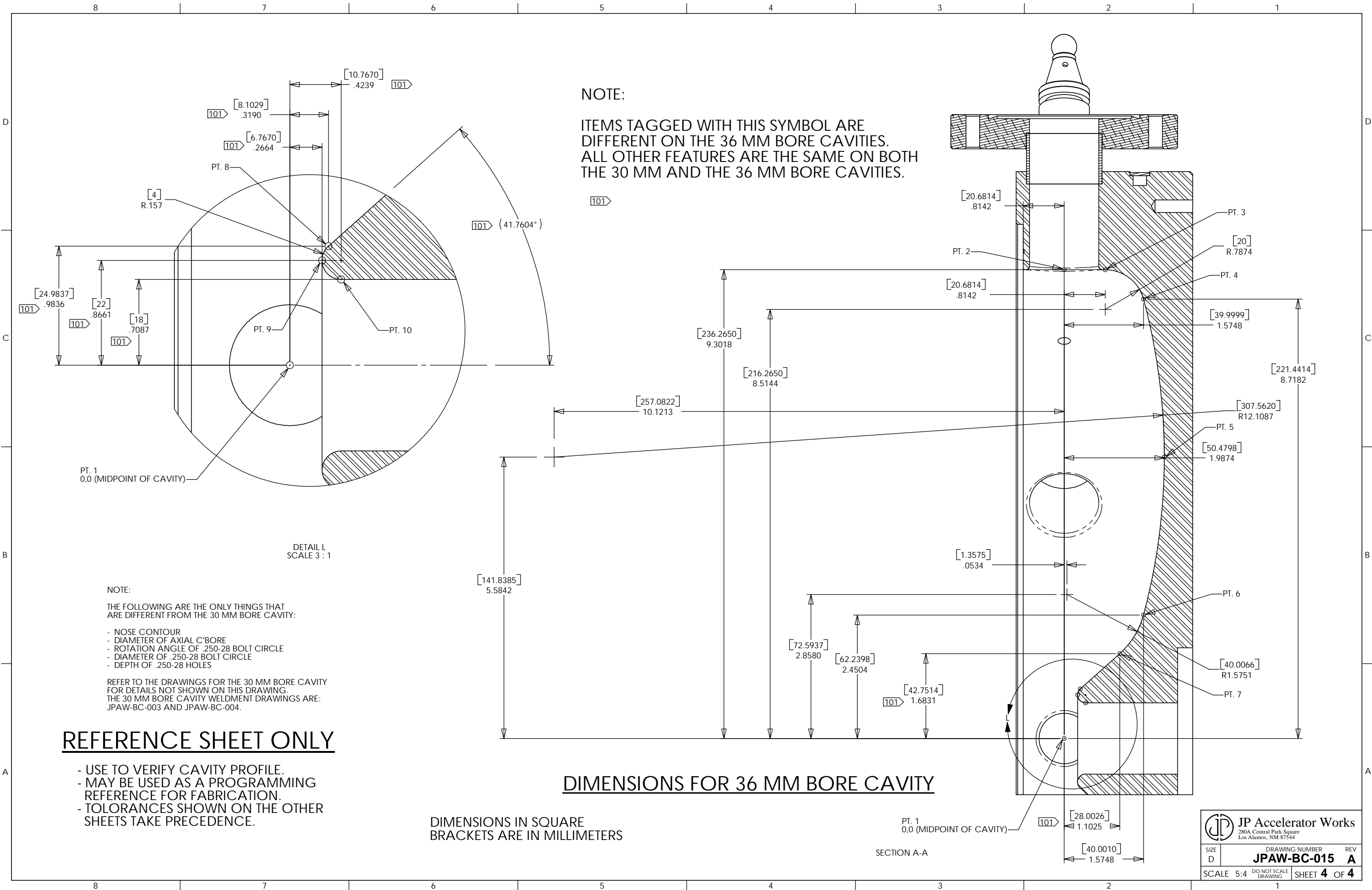
201 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.

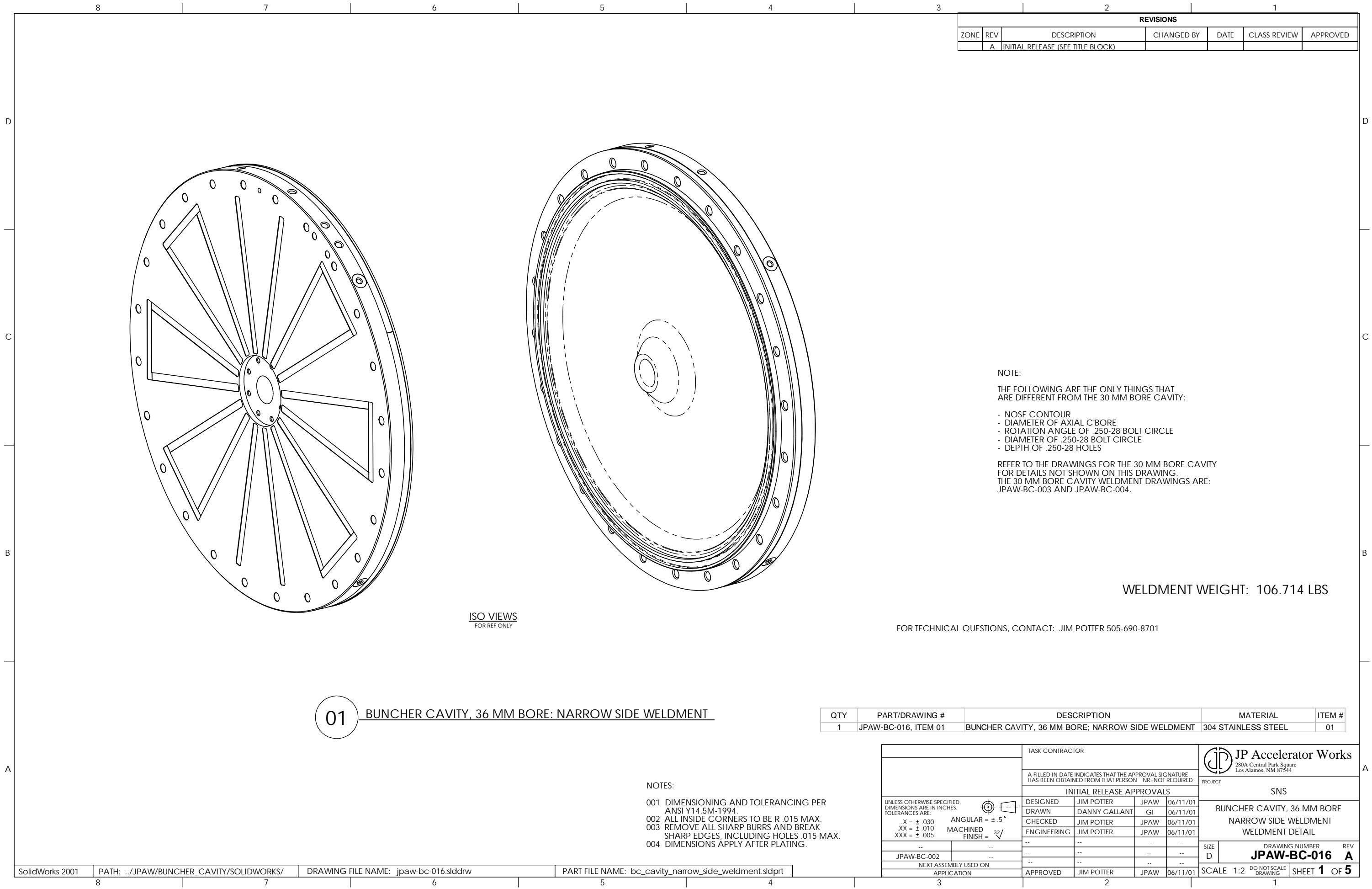
204 ALL INSIDE CORNERS TO BE R .015 MAX.

208 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.



 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-015	REV A
SCALE 3:8 DO NOT SCALE DRAWING	SHEET 2 OF 4	





REVISIONS						
ZONE	REV	DESCRIPTION	CHANGED BY	DATE	CLASS REVIEW	APPROVED
	A	INITIAL RELEASE (SEE TITLE BLOCK)				

NOTE:
THE FOLLOWING ARE THE ONLY THINGS THAT ARE DIFFERENT FROM THE 30 MM BORE CAVITY:

- NOSE CONTOUR
- DIAMETER OF AXIAL C'BORE
- ROTATION ANGLE OF .250-28 BOLT CIRCLE
- DIAMETER OF .250-28 BOLT CIRCLE
- DEPTH OF .250-28 HOLES

REFER TO THE DRAWINGS FOR THE 30 MM BORE CAVITY FOR DETAILS NOT SHOWN ON THIS DRAWING. THE 30 MM BORE CAVITY WELDMENT DRAWINGS ARE: JPAW-BC-003 AND JPAW-BC-004.

WELDMENT WEIGHT: 106.714 LBS



FOR TECHNICAL QUESTIONS, CONTACT: JIM POTTER 505-690-8701

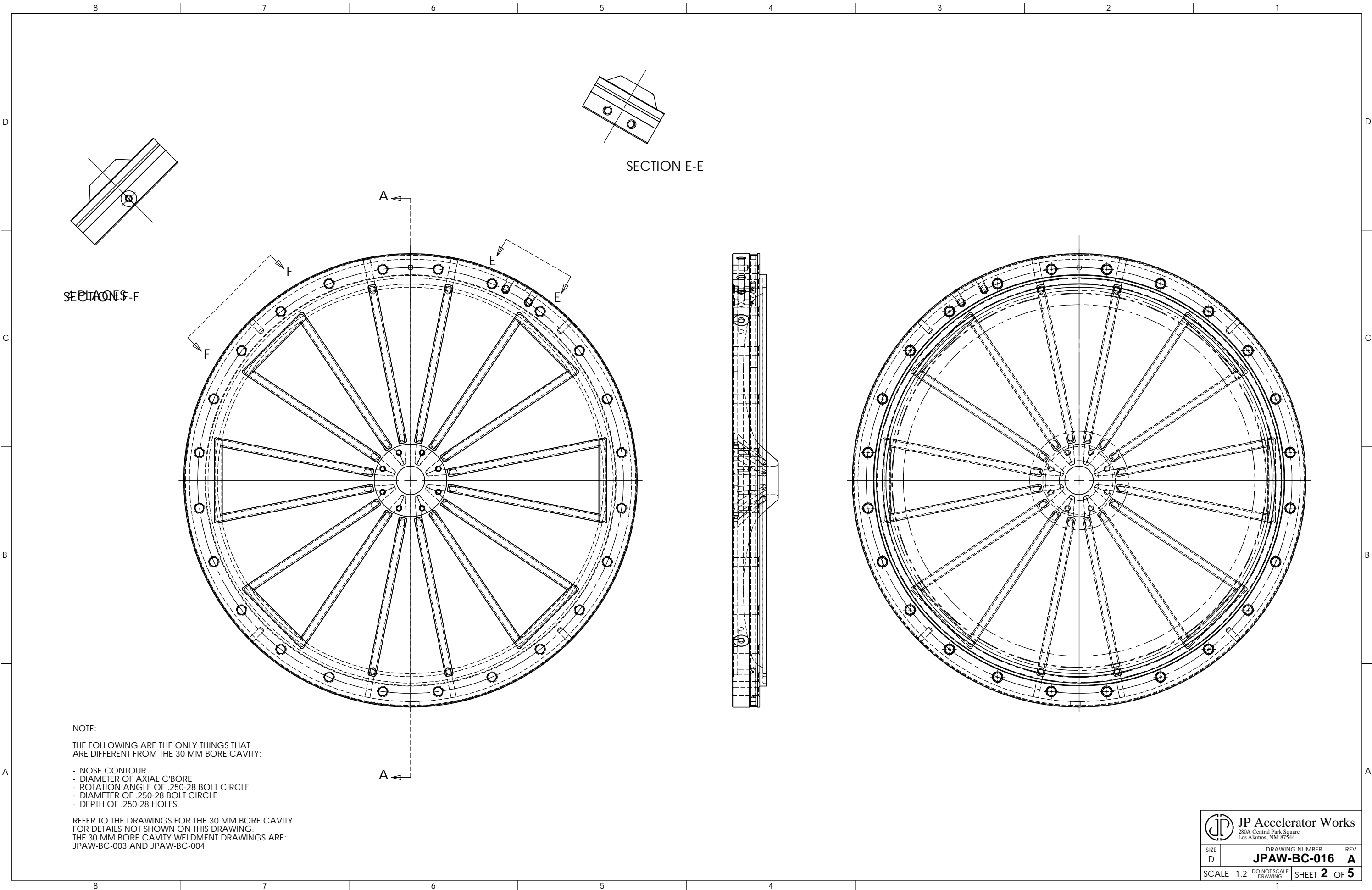
01 BUNCHER CAVITY, 36 MM BORE: NARROW SIDE WELDMENT

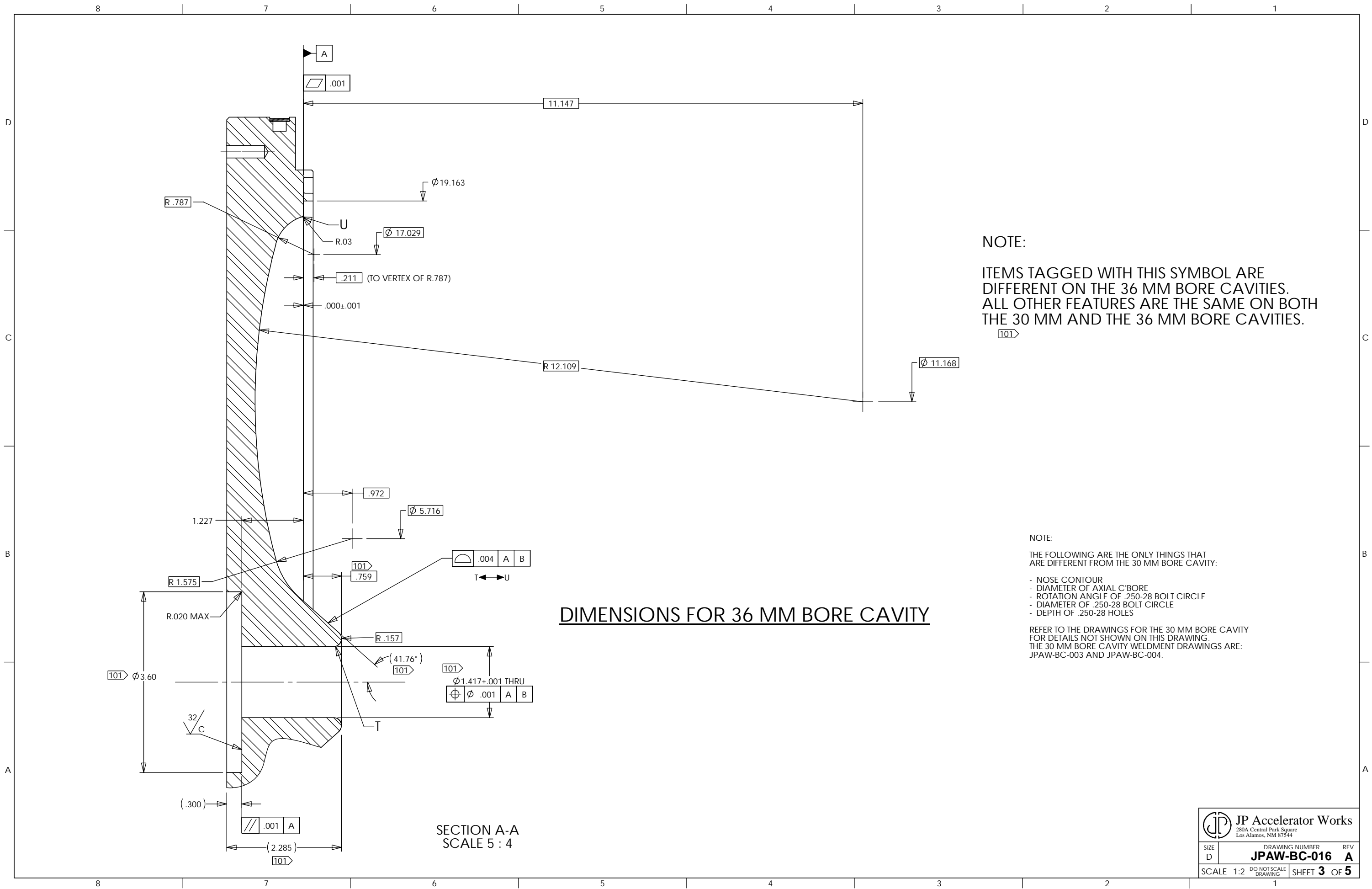
QTY	PART/DRAWING #	DESCRIPTION	MATERIAL	ITEM #
1	JPAW-BC-016, ITEM 01	BUNCHER CAVITY, 36 MM BORE; NARROW SIDE WELDMENT	304 STAINLESS STEEL	01

NOTES:

001 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1994.
002 ALL INSIDE CORNERS TO BE R.015 MAX.
003 REMOVE ALL SHARP BURRS AND BREAK SHARP EDGES, INCLUDING HOLES .015 MAX.
004 DIMENSIONS APPLY AFTER PLATING.

		TASK CONTRACTOR				<div> JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544</div>				
		A FILLED IN DATE INDICATES THAT THE APPROVAL SIGNATURE HAS BEEN OBTAINED FROM THAT PERSON NR=NOT REQUIRED								
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: .X = ± .030 .XX = ± .010 .XXX = ± .005				INITIAL RELEASE APPROVALS				PROJECT		
				SNS						
ANGULAR = ± .5° MACHINED FINISH = 32/		DESIGNED		JIM POTTER	JPAW	06/11/01		BUNCHER CAVITY, 36 MM BORE NARROW SIDE WELDMENT WELDMENT DETAIL		
		DRAWN		DANNY GALLANT	GI	06/11/01				
.X = ± .030 .XX = ± .010 .XXX = ± .005		CHECKED		JIM POTTER	JPAW	06/11/01				
		ENGINEERING		JIM POTTER	JPAW	06/11/01				
--		--		--	--	--		SIZE DRAWING NUMBER REV D JPAW-BC-016 A		
JPAW-BC-002		--		--	--	--				
NEXT ASSEMBLY USED ON		--		--	--	--				
APPLICATION		APPROVED		JIM POTTER	JPAW	06/11/01		SCALE 1:2 DO NOT SCALE DRAWING SHEET 1 OF 5		



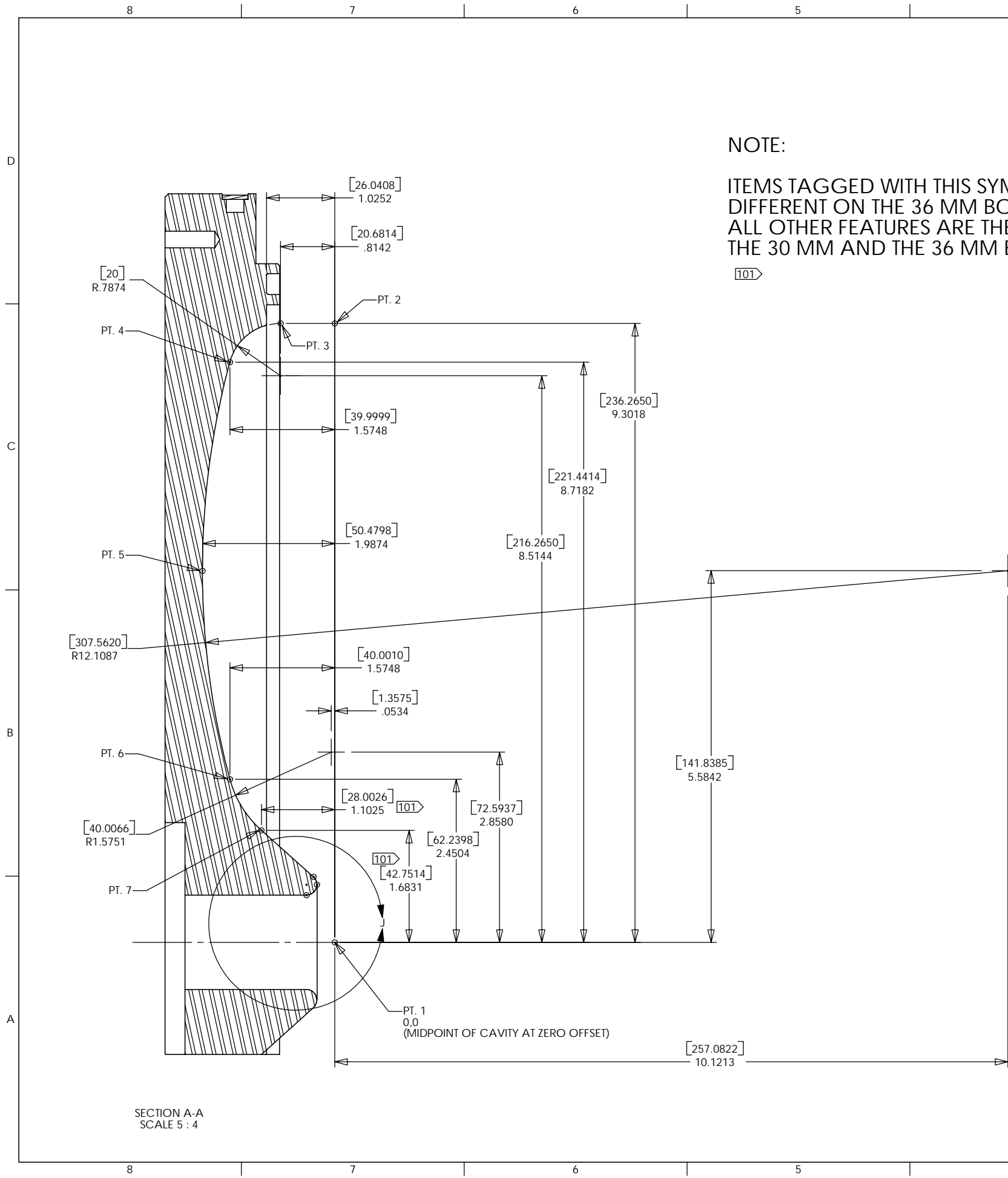


NOTE:
ITEMS TAGGED WITH THIS SYMBOL ARE DIFFERENT ON THE 36 MM BORE CAVITIES. ALL OTHER FEATURES ARE THE SAME ON BOTH THE 30 MM AND THE 36 MM BORE CAVITIES.

NOTE:
THE FOLLOWING ARE THE ONLY THINGS THAT ARE DIFFERENT FROM THE 30 MM BORE CAVITY:

- NOSE CONTOUR
- DIAMETER OF AXIAL C'BORE
- ROTATION ANGLE OF .250-28 BOLT CIRCLE
- DIAMETER OF .250-28 BOLT CIRCLE
- DEPTH OF .250-28 HOLES

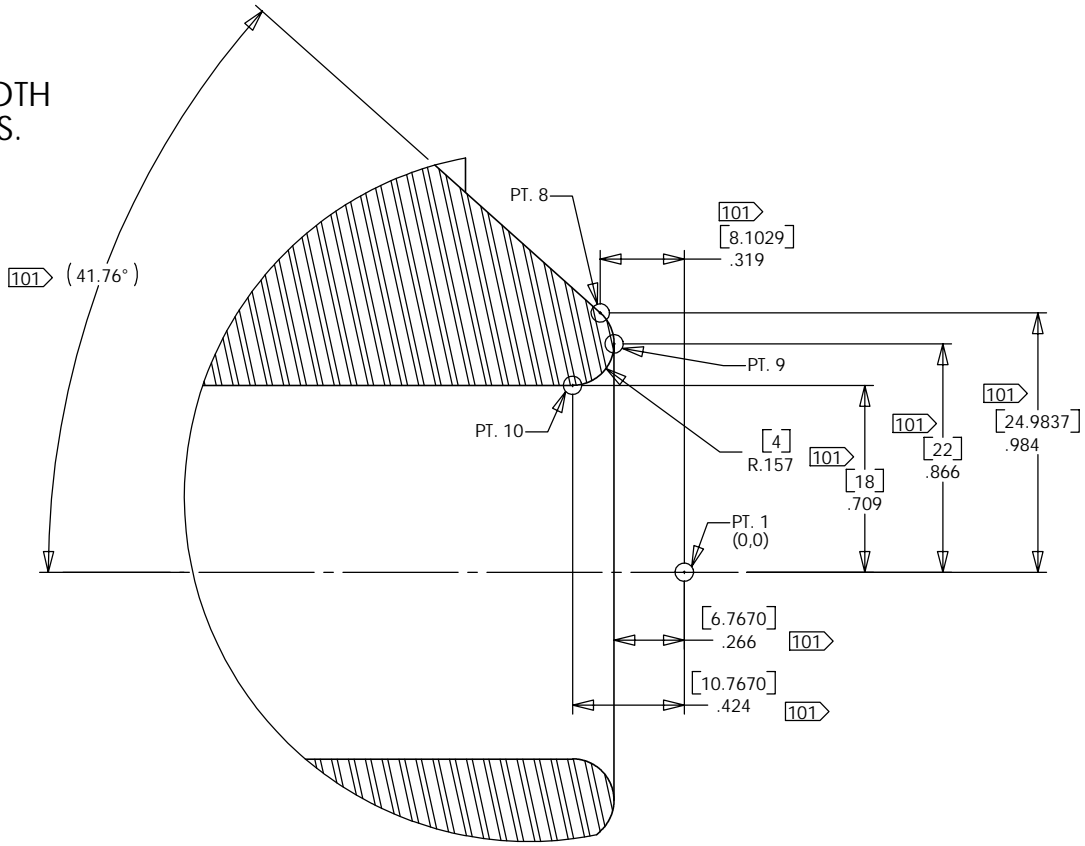
REFER TO THE DRAWINGS FOR THE 30 MM BORE CAVITY FOR DETAILS NOT SHOWN ON THIS DRAWING. THE 30 MM BORE CAVITY WELDMENT DRAWINGS ARE: JPAW-BC-003 AND JPAW-BC-004.



NOTE:

ITEMS TAGGED WITH THIS SYMBOL ARE DIFFERENT ON THE 36 MM BORE CAVITIES. ALL OTHER FEATURES ARE THE SAME ON BOTH THE 30 MM AND THE 36 MM BORE CAVITIES.

[101]



DIMENSIONS FOR 36 MM BORE CAVITY

NOTE:


THE FOLLOWING ARE THE ONLY THINGS THAT ARE DIFFERENT FROM THE 30 MM BORE CAVITY:

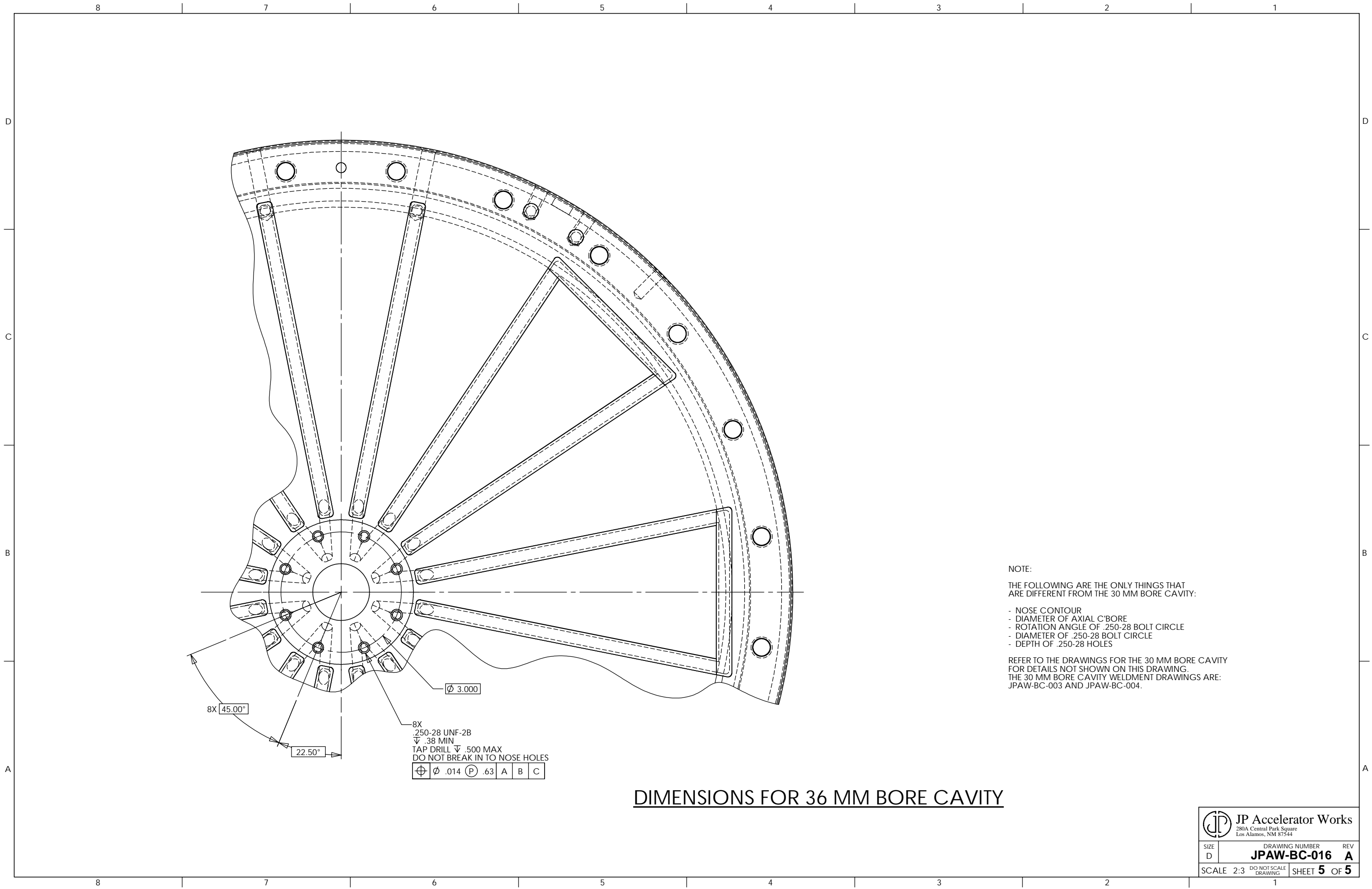
- NOSE CONTOUR
- DIAMETER OF AXIAL C'BORE
- ROTATION ANGLE OF .250-28 BOLT CIRCLE
- DIAMETER OF .250-28 BOLT CIRCLE
- DEPTH OF .250-28 HOLES

REFER TO THE DRAWINGS FOR THE 30 MM BORE CAVITY FOR DETAILS NOT SHOWN ON THIS DRAWING. THE 30 MM BORE CAVITY WELDMENT DRAWINGS ARE: JPAW-BC-003 AND JPAW-BC-004.

REFERENCE SHEET ONLY

- USE TO VERIFY CAVITY PROFILE.
- MAY BE USED AS A PROGRAMMING REFERENCE FOR FABRICATION.
- TOLORANCES SHOWN ON THE OTHER SHEETS TAKE PRECEDENCE.


 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-016	REV A
SCALE 1:2 DO NOT SCALE DRAWING	SHEET 4 OF 5	



NOTE:
THE FOLLOWING ARE THE ONLY THINGS THAT
ARE DIFFERENT FROM THE 30 MM BORE CAVITY:

- NOSE CONTOUR
- DIAMETER OF AXIAL C'BORE
- ROTATION ANGLE OF .250-28 BOLT CIRCLE
- DIAMETER OF .250-28 BOLT CIRCLE
- DEPTH OF .250-28 HOLES

REFER TO THE DRAWINGS FOR THE 30 MM BORE CAVITY
FOR DETAILS NOT SHOWN ON THIS DRAWING.
THE 30 MM BORE CAVITY WELDMENT DRAWINGS ARE:
JPAW-BC-003 AND JPAW-BC-004.

 JP Accelerator Works 280A Central Park Square Los Alamos, NM 87544		
SIZE D	DRAWING NUMBER JPAW-BC-016	REV A
SCALE 2:3	DO NOT SCALE DRAWING	SHEET 5 OF 5